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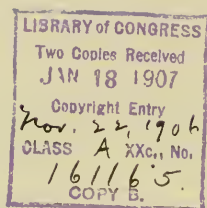


A  
GUIDE  
TO THE  
TEACHER'S MASTERY OF  
TEXTS  
AND  
AIDS IN  
ELEMENTARY INSTRUCTION

BY

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## CHAPTER I

# READING

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## Part One

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### Importance of Reading

READING is of vital importance to the child because he must read intelligently in order to understand the various texts he will have to study.

### Value of Reading

I. It is one of the earliest subjects to be studied by the average child, and the one which perhaps beyond all others is continued throughout life. II. Broad culture and wide information are gained by means of it. III. The man who is well read may become highly intelligent even if he has been deprived of school advantages. IV. One becomes acquainted with those who have penned masterly thoughts in all ages.

### The Natural Process

The natural process by which the child learns to read is first, the object ; second, the concept of the object ; third, the name ; fourth, the spoken word ; and fifth, the written word.

### Systems of Teaching Reading

Some of the systems by which the child learns to read are the Eclectic, the Sentence, the Word and Sentence combined, the Ward Rational and Action system. Many others might be mentioned, but they are, as a rule, modifications of these.

### Board Work

A sufficient amount of board work, which may consist of sentences drawn from the child by skillful questioning, or those of the teacher's own construction, written upon the board to be read by the child, should precede the study of the text. The basis of board work may be those subjects which appeal most to the child's life and come closest to his experience, such as nature study,

natural phenomena, stories of history, fables, myths, art, beginning geography and manual training. If well graded, intelligent board work is continued for four months, or even longer, it forms a fine foundation for the text. Board work may be made preparatory to the text by using such subjects as are included in the text which is to succeed, and by asking questions in such a manner that the child will unconsciously use the words of the text. Script should be used almost exclusively in this work. When it is time to make the transition to the text a few lessons may be given in which print is used and the most difficult words placed upon the board in script and print.

### **Transition From Script to Print**

The ideal way to teach the child to read is when a subject has been finished by means of board work to arrange these same sentences logically, have them printed by means of the hectograph, mimeograph, typewriter, printing press, or cheapest of all, by hand, and placed in the child's hands to read. In many progressive schools, the printing press is owned by the board, and is used entirely to further the work of the school. There will be given a life and an interest to the recitation that cannot be obtained by giving the child the text to read. For these sentences are upon a subject in which the child is vitally interested. They were formed by him or by some of his friends, and grew so naturally out of the work of the class that he seizes the connection between the spoken and printed thought as he cannot possibly do when the board work is followed by the book. These sentences may eventually be bound together and thus teacher and pupil form their own text. This aids the child to make the transition readily, and this work is also furthered by seat work with the letters of the alphabet, by seeing the alphabet in large size located permanently in a conspicuous place in the room, and by the teaching of phonics.

### Phonics

The child should be taught phonics.

1. To enable him to discover new words for himself.
2. To prepare him to use the dictionary eventually.
3. To teach him to articulate distinctly.

He should be taught phonics after he has learned from fifty to about two hundred words.

Many valuable suggestions for teaching him phonics may be gained from Mrs. Pollard's Synthetic Manual.

### Word Drills

The word drills may be given in connection with the board or reader work, and serve to help the child retain the word.

### Correlation

Language, history, nature study, art and geography are some of the subjects with which reading may be correlated to advantage.

### New Words

One of the greatest hindrances in reading is the lack of the mastery of words, and much of the teacher's force in the early stages of the work must be put upon the mechanical process of fixing them in the child's mind. He should not be taught isolated lists of words, but should learn the new words, as the need of them arises since he grasps with greater force that for which he feels a present need.

### How to Teach Expression

Another hindrance to good reading is lack of expression, and the teacher needs to work diligently to gain this from the child. The child copies in expression his elders with whom he comes in contact, and that copy is often unnatural and artificial. The reading manner which should be cultivated is the animated, conversational one. If the child grasps the thought clearly, as may be ascertained by questioning, and reads with reasonably good expression, that should suffice.

The child taught to read correctly by the word and sentence method has taken a long step towards good expression. Some of the ways in which good expression may be gained are these:

1. In the beginning work, require the child to glance at the sentence quickly and read without looking at the book.
2. Have the lesson reproduced before any reading is done in class.
3. Let the child assume a character in a dialogue.
4. Allow him to read to the class a selection outside of the text, which particularly interests him.
5. Let one child read while the others close books, those listening reproducing later. Sentiment is against the poor reader, because those hearing cannot grasp the thought readily.

The teacher should rarely read the text for the child. He may show his ideal of good rendition by selections read at other times than during the reading period. His interpretation at such times should be as faithful and faultless as possible. If he is a poor reader it would be best to read but seldom before the school. An especially capable pupil, who is able to hold the attention of the pupils, may read before the school, as this is an aid to the individual and an incentive to others.

### Faults in Reading

*Hesitation* is often due to a lack of the mastery of words or of expression, showing the mechanical process has not been emphasized sufficiently. If the *articulation* is not distinct it may be because phonics was not well taught in the lower grades or because of impediment of speech. Drill may be given upon special sounds or words. Attention may be given to phonics in connection with the spelling lesson; or texts, arranged especially for teaching phonics to advanced pupils, may be studied. *The high-strained tone of voice* often results from embarrassment, or from imitating artificial copies.

The child should be taught that reading means reproducing the author's thought in a natural manner. *Drawling* may result from the lack of the mastery of words, and failure to grasp the thought. It is said that the pupil has a mental as well as a physical pace, but perhaps resort to more of the mechanical process may obviate this difficulty.

### **Oral Reproduction as a Substitute for Oral Reading**

Since there may be much listlessness and inattention in the reading recitation, would it be a good plan to substitute a good deal of oral reproduction for oral reading? The child may be pronouncing the words distinctly and be giving fairly good expression while the undercurrent of his thoughts is running in an entirely different direction. If he reads but once, in class, silently, for the first time, a selection he knows he may be required to produce orally, he will concentrate his attention in a manner which brooks no comparison with the attention he bestows upon oral reading. In reproducing, he must necessarily put the thought into his own words, and the effort in this case is vastly greater than the other. Most of the reading which the average child does is for the sake of getting the thought, while the one who reads orally is quite an exception. It would seem that even if an entire substitution is not made it would be a very valuable occasional exercise. If the pupil in studying finds a word he does not know the teacher may help him pronounce it or write it with mark and accent upon the board, erasing it as soon as the pupil has noted, so that the work may be individual.

### **Why the Child Will Not Study His Reading Lesson**

The average child will not spend much time upon his reading lesson because:

1. It doesn't interest him.
2. He is not given something definite to do.
3. He has studied reading ever since he started to school,

and there is nothing particularly new.

4. Of over-confidence in his ability to make a fairly creditable recitation in the average class, if he uses his wits well during the class period, without making much previous preparation.

5. Many pupils do not understand what an intensive study of the English language means.

6. When the child has read the selection and grasped the thought he deems that sufficient.

7. He knows that the work of the study period will not help him materially in the recitation.

8. He has heard the book read so many times that all interest is gone.

### **The Study Period**

It is essential to plan with great care the work of the study period. In the lower grades it is necessary to give the child something in the line of written preparation to keep him fully employed at this time. In the upper grades, if the reading recitation is to profit the child, he must be given something definite to do that he will be interested in performing.

### **Lessons in the Order of the Text**

In the lower grades it may be necessary to assign the lessons in order because of gradation, but in the upper grades some subjects may be far more interesting to the child at certain times and under existing conditions than at others, so these should be assigned as judgment dictates.

### **Periodicals Instead of Readers**

If the right selections from the best periodicals are judiciously chosen they may prove very interesting to the pupil. The material is fresh, and is what intelligent people are reading and discussing, and great interest may be awakened among the pupils.



### **Dramatization**

After a selection has been read and understood, if the child enjoys it, he may be allowed to dramatize it, thus making far more vivid and real the mind's impression.

### **Use of the Dictionary and Encyclopedia**

The dictionary and encyclopedia may add much interest to the reading lesson. The average child will, perhaps, not use it very intelligently before ten years of age.

### **The Reading of Standard Authors**

The teacher may induce the child to read standard authors:

1. By assigning interesting selections to be read from these authors.
2. By being thoroughly interested in literature herself.
3. By reading just enough at opening exercises to make the child eager to read more.

### **A Desire for Reading Good Literature**

One of the finest deeds a teacher can perform for a pupil is to cultivate in him the habit of reading good literature. The teacher may influence the child in choosing his library books, or in his home reading. If she has a strong influence over her pupils, the mere mention of a book may make the child wish to read it. She may have a reading table containing choice books where pupils may read at intermissions.

### **The Literary Atmosphere of a Home**

The literary atmosphere of a home is so far reaching in its influence that the teacher may well study closely to see how it was created. The current topics of the day are discussed. Geographical and historical references bearing upon them are looked up and read. If a war is in progress, a map is in an easily accessible place, and events are noted from day to day. A book is read and discussed in the family circle, and criticisms by able writers are noted.



### **Moral Lessons**

The child likes to discover the moral lesson for himself rather than have it forced upon him. Ask the pupil his opinion of a character's action and as he approves or condemns you know what he would have done if placed in like circumstances, and thus he forms his standard of morality.

## CHAPTER II

## QUESTIONS ON READING

1. Why is reading of such importance to the child?
2. Of what value is it to him?
3. When begin to teach him reading?
4. When cease?
5. What is the natural process by which the child learns to read?
6. What are some of the systems by which he learns to read?
7. How is each of these systems taught?
8. What are good books of reference on the subject of primary reading?
9. What should precede the study of a reading text?
10. What is meant by board work?
11. What may be made its basis?
12. How give a lesson in it?
13. How long should it be continued?
14. Should script or print be used?
15. How may board work be made preparatory to text?
16. How is transition made from board work to text?
17. By what means is script put into print?
18. In what schools is the printing press used?
19. Why is phonics taught?
20. When teach phonics?
21. How teach it?
22. Why are word drills given?
23. How may such drills be given?
24. When should the child begin to use the text?
25. What are the titles of some of the best first readers?
26. With what subjects may reading be correlated?
27. What hinders the child from being a good reader?
28. How should new words be taught?

29. Should isolated lists be taught?
30. How gain expression from the child?
31. Who are the child's copies in expression?
32. What kind of reading manner do you wish to cultivate in the child?
33. How gain expression from him?
34. What degree of expression should be exacted of the child?
35. Should the child imitate the teacher's reading?
36. If not, how will he gain the teacher's idea of good reading?
37. What should be the quality of the teacher's effort?
38. If the teacher is a poor reader is it best for her to read before the school?
39. Would you allow an especially capable pupil to read before the school?
40. Of what value would it be?
41. What are good selections to read to pupils?
42. What causes the child to hesitate in reading?
43. How overcome the habit of hesitation on pupil's part?
44. If phonics has been neglected in lower grades how may it be taught to advanced pupils?
45. How may distinct articulation be secured?
46. Why should the child articulate distinctly?
47. When should the observance of punctuation marks be introduced?
48. What causes the child to read in a high-strained tone of voice?
49. How prevent the child from reading in this manner?
50. What makes the child read in a sing-song tone?
51. What may be done to prevent such a tone?
52. What causes the child to read in a drawling tone?
53. How break the habit of drawling?
54. Should there be oral reproduction as a substitute for oral reading?
55. Which demands more effort from the child?

56. How should new words be taught in this case?
57. Why will not the average child spend much time on his study of the reading lesson?
58. What are the child's difficulties in studying reading?
59. What are the child's difficulties in reading in 4th, 5th, 6th, 7th, 8th, 9th grades, and the High School?
60. Why is it necessary to plan carefully for the work of the study period?
61. What should the child be given for study period in 4th, 5th, 6th, 7th, 8th, 9th, and High School grades?
62. How assign a lesson to different grades?
63. Should lessons be given in order of text book?
64. What subjects are made the bases of readers?
65. Which would be your choice?
66. Should the child study thoroughly one reader in a grade or handle many texts?
67. What is your opinion of using periodicals instead of, or as supplementary to, texts?
68. How may newspapers be used, instead of readers?
69. What periodicals would you use?
70. Should newspapers as reading matter be encouraged below 4th grade?
71. How should supplementary reading be used?
72. What are some of the best supplementary books?
73. What is dramatization?
74. What is its value?
75. How often should it be used?
76. What selections may be dramatized successfully?
77. In what grades should the dictionary be used?
78. In what grades the encyclopedia?
79. Should spelling be taught in connection with reading lesson?
80. If so, why?
81. In what grades?
82. What place on the program should the reading recitation occupy?

83. How many periods a day should be devoted to it?
84. How much time should be spent in one recitation of 4th, 5th, 6th, 7th, 8th, 9th and High School grades?
85. How induce the child to read the works of standard authors?
86. How may the habit for good reading in after life be cultivated?
87. What bearing has the literary atmosphere at home, or lack of it, upon the child's power to interpret literature?
88. Who was reared in a literary atmosphere?
89. How was this atmosphere created?
90. How teach the moral lessons to be gained from the selection?
91. What selections are suitable for High School classes?
92. How should a selection in such a grade be presented?
93. What difficulties beset the High School pupil in reading?
94. How may reading reports be kept?
95. What three selections are considered by some to be the finest in the English language?
96. What can the teacher do to influence the child's outside reading?
97. What may be done to provide reading material for children outside of texts?
98. What is meant by the spiral system in reading?
99. Why is reading so difficult a subject to teach?
100. Is it possible to obtain from the child in the study of literature the same amount of concentrated effort exacted in a subject like mathematics or language?
101. Would it be possible for the pupil to gain as much mental discipline from literature as from mathematics or the languages?
102. What is the purpose of devices in reading?
103. What are some good devices for teaching reading?

## CHAPTER III

Suggestions for the Study of Literary  
Selections

1. What is the purpose of such study?
  - a. To cultivate in the child a taste for the finest in Literature.
  - b. To instill in him
    1. Love for the highest and best.
    2. Noble thoughts.
    3. Patriotism.
    4. Courage.
  - c. To aid in cultivating expression.

If the child thinks clearly and feels deeply there will be no room for fear or self-consciousness, and expression will become a delight.

2. The selection should be an example of the finest literature and the purest English.
3. Author.
  - a. Conditions under which the selection was written.
  - b. Most notable works.
  - c. Life.
  - d. Rank as a writer.
4. If the source of the plot of the selection is available, require the pupil to write upon this subject.
  - a. Have the papers read aloud, discussed, and unnecessary parts eliminated.
5. The historical or local setting should be noted.
6. Any striking peculiarities of houses, buildings or gardens should be pointed out.
7. Note the central or main thought running through the selection.
8. Have the selection read and viewed as a whole.
9. Let the obscure phrases, passages and unusual or obsolete forms be found and explained.

Note.—Do not analyze the selection until all life is taken out of it.

10. Require the pupil to write a review of the selection.

11. The pupil may write an analysis of the different characters portrayed.

Note.—Nos. 10 and 11 should be the result of silent, independent study.

12. Have the pupil commit and recite especially beautiful or strong passages.

13. Let there be one recitation in which each child reads or recites a selection chosen by himself.

14. If possible encourage the pupils to dramatize the selection. This should come as the summing up of all experiences.

a. The class may be divided into groups and each group may dramatize.

b. After such action—

1. Good things may be noted.

2. Suggestions made.

3. Criticisms offered.

15. While scenery and costumes add greatly to the interest they are not essential. Leland T. Powers, Bertha Kunz Baker, Katherine Jewell and Katherine Oliver employ neither of them.

16. The child may be prepared to listen intelligently to some Shakesperian play or some entertainment of a high order to be presented in the place by fine actors.

## CHAPTER IV

## Educational Value of Text Examination.

It is believed that the critical examination of a few of the best texts will prove beneficial to the teacher, for the following reasons :

1. It creates a standard by which the teacher is enabled to judge of and compare the superiority and inferiority of texts.

2. A text enters so largely into the innermost intellectual life of the child and determines to such a degree the teacher's success that the examination of texts should render the important task of selecting, less difficult.

3. It gives a teacher the power to select personally and to give intelligent aid to those introducing new books to be used as texts or supplementary work.

4. It teaches different views of master minds upon the presentation of subjects and the arrangement of material.

5. By observing the views of different authors and gaining some idea of the wealth of material extant it gives a teacher a far broader scope and prevents narrow-mindedness.

6. The examination of many texts upon the same subject broadens the teacher's method of presenting any one text.

7. It impowers the individual to know just where to find references and supplementary work not included in the text used.

8. If a teacher masters a text thoroughly she will enjoy the book more fully, impart more valuable instruction, and secure better work from the pupil.

9. If the teacher is thoroughly conversant with the author's views of a subject, she will use his material more intelligently.

10. It enables one to select a book best suited to a particular purpose.

11. By examining books according to the laboratory



method, merits and demerits are more firmly fixed in the mind than by discussing facts concerning them and memorizing them.

12. It will enable the teacher to determine which texts are too difficult for the child.

13. It enables the teacher to see which is the most modern and up-to-date in its treatment.

14. It brings before the teacher some of the best texts now published.

15. It instructs how to master the problems with which a teacher has to contend.

Because of the value of this work there will be found in this text an outline for the examination of First, Second and Third Readers, for the readers from the Fourth Grade and upwards, for texts in English, for Arithmetics and Geographies. The first four points in the first outline, Cover, Author, Publisher, and Year Published, form the beginning of each succeeding outline, but are not repeated for the sake of brevity.

## CHAPTER V

# Outline for the Study of Texts of First, Second and Third Readers

---

## I. Cover.

- a. Color?
- b. Design?
  - 1. Artistic?
  - 2. Conventionalized?
- c. Appropriate?
- d. Substantially bound?

## II. Author.

- a. Name?
- b. Rank?

## III. Publisher.

- a. Name?
- b. Address?

## IV. Year published?

## V. Preface.

- a. Number of pages?
- b. Comparative length?
- c. Main heads?
- d. Are they definitely brought out?
- e. Comprehensive?
- f. Does it contain reasons why reading is taught?
- g. Does it state the ends to be accomplished by the book?
- h. If a set is published, are the contents and purpose of each stated in any one of the series?
- i. Does it contain acknowledgment of aid?

## VI. Acknowledgment of permission to publish.

- a. Where found.
  - 1. Preface?
  - 2. Close of selection?

## VII. Introduction.

- a. Comparative length?
- b. Acknowledgment of aid?

## VIII. Contents.

- a. Number of selections
  1. Prose?
  2. Poetry?
- b. Title of selection?
- c. Page where found?
- d. Name of author?
- e. Arrangement
  1. According to page?
  2. According to author's work?
  3. Topical?
- f. Classified?

## IX. Suggestions to teachers.

- a. Where found?
- b. Helpful?
- c. Sufficient number?

## X. Material of text.

- a. Which predominates
  1. Prose—Why?
  2. Poetry—Why?
- b. Selections?
  1. Nature study?
  2. Nature myths?
  3. Natural phenomena?
  4. Scientific?
  5. Legends?
  6. Fables?
  7. Fairy Tales?
  8. Classical Tales?
  9. Stories from noted authors abridged and adapted?
  10. Child stories? i. e. those appealing to the experience and interest of childhood.

11. Dialogues?
12. History?
13. Biography?
14. Literary biography?
15. Translations?
16. Poems?
17. Biblical selections?
18. Selections pertaining to child life in other countries
  - a. "The Chinese Boy?"
  - b. "In Japan?"
  - c. "The Truthful Little Persian?"
19. Folk-lore
  - a. Old Irish?
  - b. Spanish?
  - c. Syrian?
  - d. "Hindu Fairy Tale?"
- c. If material is of a conglomerate nature, what subject predominates?
- d. Product
  1. Of writers of highest rank?
    - a. What is the proportion of classics?
  2. Modern authors ranking well?
- e. Arrangement
  1. Prose and poetry interspersed?
  2. Work of authors grouped?
  3. Kindred subjects grouped?
  4. Are subjects grouped because of the relation of thought?
  5. Logical?
  6. Spiral?
- f. Is it true to the instincts of childhood?
- g. Is book tinged with local coloring?
- h. Material used to fill in space
  1. Memory gems
    - a. Poetry?

- b. Prose?
  - 2. Proverbs?
  - 3. Trite sayings?
    - a. Which of these three predominate?
  - i. Author's name at close of selection?
  - j. Selections to be memorized
    - a. Number?
    - b. Kinds?
  - k. Used as
    - 1. Text?
    - 2. Supplementary work?
- XI. Language exercises.
  - a. Comparative number?
  - b. Words for sentence making?
  - c. Questions to be answered after the study of the picture?
  - d. Copying of a letter and its reply?
- XII. Reviews.
  - a. Comparative number?
  - b. How often occur?
  - c. Lesson headed, "Review of difficult words?"
- XIII. Sight reading.
  - a. How often found?
  - b. New view of an old subject?
- XIV. Phonetic exercises.
  - a. Comparative number?
  - b. Phonetic chart?
  - c. Phonetic drills?
  - d. Sound table?
  - e. Where found?
    - 1. Scattered through book?
    - 2. At close of text?
- XV. Print.
  - a. Size
    - 1. Large?
    - 2. Small?

- b. Clear?
- c. Attractive?
- d. Marked difference in type?
- XVI. Quality of paper.
  - a. Fine?
  - b. Medium?
  - c. Poor?
- XVII. Script.
  - a. Capitals and small letters?
  - b. Lesson with script and print alternating?
  - c. To be copied?
  - d. Entire lesson in script?  
(To familiarize child with reading writing.)
  - f. Social letters printed in script?
  - g. Where found.
    - 1. In front of text?
    - 2. At close?
    - 3. Scattered through?
- XVIII. Alphabet.
  - a. Large and small letters
    - 1. In script?
    - 2. In print?
- XIX. Arabic notation.
  - a. Where found?
- XX. Definitions.
  - a. Comparative number?
  - b. Of what consist
    - 1. Explanation of words?
    - 2. Resemblances to explanations?
- XXI. Illustrations.
  - a. List of masterpieces and illustrations?
    - 1. Comparative length?
    - 2. Well paged?
  - b. Number?
  - c. Quality
    - 1. Fine?

- 2. Medium?
  - 3. Poor?
  - d. Colored?
  - e. Educative?
  - f. Portraits of authors?
  - g. Reproductions of famous masterpieces?
  - h. Of noted statuary?
  - i. Historical?
  - j. Artist mentioned?
  - k. Purely decorative without reference to text?
  - l. Drawn with few lines for pupil to copy?
  - m. Where found
    - 1. On title page?
    - 2. On pages at beginning and close of book usually left blank?
    - 3. At beginning of lesson?
    - 4. Interspersed through the text?
  - n. Head pieces
    - 1. Number?
    - 2. Quality?
  - o. Tail pieces
    - 1. Number?
    - 2. Quality?
- XXII. Division into lessons
- a. Well divided?
  - b. Poorly divided?
  - c. Practically no division made?
- XXIII. Grading of lessons.
- a. Well graded?
  - b. Poorly graded?
  - c. No attempt at gradation?
- XXIV. Word lists.
- a. Number of pages, if at close of book?
  - b. Diacritically marked, accented and separated into syllables?
  - c. Silent letters italicized?

- d. Correct pronunciation in parenthesis?
- e. Complete list of words in the reader?
- f. Arranged according to their appearance in lessons?
- g. Guide to pronunciation?
- h. List which every child should be able to spell?
- i. Where found
  - 1. At close of book?
  - 2. At beginning and close of selection?

XXV. Degree of difficulty.

- a. Sufficiently difficult.
- b. Too difficult?
- c. Not difficult enough?

XXVI. For what age?

XVII. For what grade?

XXVIII. Favorable criticisms?

XXIX. Unfavorable criticisms?

XXX. Problems before the teacher?

XXXI. Psychological aspect?



## CHAPTER VI

# Outline for the Study of the Texts from the Fourth Grade and Upwards

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V. *Preface.*

- a. Number of pages?
- b. Comparative length?
- c. Main heads?
- d. Are they definitely brought out?
- e. Comprehensive?
- f. Does it contain reasons why reading is taught?
- g. Does it state the ends to be accomplished by the book?
- h. If a set is published, are the contents and purpose of each stated in any one of the series?
- i. Does it contain acknowledgment of aid?
- j. Does it contain names of critics?

VI. *Acknowledgment of permission to publish.*

Where found

- a. Preface?
- b. Close of selection?

VII. *Introduction.*

- a. Comparative length?
- b. Acknowledgment of aid?
- c. Names of critics?

VIII. *Contents.*

- a. Number of selections
  1. Prose?
  2. Poetry?
- b. Titles of selections?
- c. Pages where found?
- d. Names of authors?
- e. Arrangement
  1. According to pages?

2. According to author's work?
  3. Topical?
  4. Alphabetical?
  5. Logical?
  6. Varied?
- IX. *Article on the reading lessons and its uses.*
- X. *List of authors and their selections.*
- Alphabetically arranged?
  - Length of list?
  - Page indicated?
- XI. *Suggestions to teachers.*
- a. Comparative number?
  - b. Sufficient number?
  - c. Helpful?
  - d. Is psychological view of reading presented?
  - e. Where found?
- XII. *Material of text.*
- a. Which predominates
    1. Prose—why?
    2. Poetry—why?
  - b. Prose selections
    1. Classical?
    2. Cutting from a standard work?
    3. Translation from a classic of a foreign language?
    4. Historical?
    5. Oratorical?
    6. Biographical?
    7. Autobiographical?
    8. Philosophical?
    9. Didactic?
    10. Biblical?
    11. Narrative?
    12. Descriptive?
    13. Scientific?
    14. Nature study?

15. Eulogy?
16. Legendary?
17. Expository?
18. Argumentative?
19. Revery?
20. Allegorical?
21. Mythical?
22. Humorous?
23. Essay?
24. Pathetic?
25. Address?
- c. Poetical selections
  1. Dramatic?
  2. Sonnet?
  3. Biblical?
  4. Hymn?
  5. Legend?
  6. Historical?
  7. Philosophical?
  8. Patriotic?
  9. Elegy?
  10. Ode?
  11. Ballad?
  12. Lyric?
  13. Allegory?
  14. Dirge?
  15. Didactic?
  16. Nature study?
  17. Narrative?
  18. Pathetic?
  19. Temperance?
  20. Ordinary?
- d. If the material is of a conglomerate nature, what subject predominates?
- e. Product
  1. Of writers of highest rank?

- a. What is the proportion of classics?
    - 2. Of modern authors ranking well?
  - f. Arrangement
    - 1. Prose and poetry interspersed?
    - 2. Work of authors grouped?
    - 3. Kindred subjects grouped?
    - 4. Are these grouped because of relation in thought?
    - 5. Logical?
  - g. Is it true to the instincts of childhood?
  - h. Sketches of authors' lives
    - 1. At beginning of selection?
    - 2. At close of selection?
  - i. Is book tinged with local coloring?
  - j. Prose quotations interpolated in finer print?  
Poetical quotations interpolated in finer print?
  - k. Material used to fill in space
    - 1. Memory gems
      - Poetry?
      - Prose?
    - 2. Proverbs?
    - 3. Trite sayings?
      - a. Which of these three predominate?
    - 4. Where found?
      - a. Between table of contents and list of authors?
      - b. On pages usually left blank at beginning and close of book?
      - c. On title page?
      - d. At beginning of selection?
      - e. At close of selection?
  - l. Author's name at close of selection?
- XIII. *Explanatory notes.*
- A.
    - a. Comparative number?
    - b. Lengthy?
    - c. Clear?

- d. Confusing?
- e. In different type?
- B. Consist of what.
  - 1. Attempts to make clearer the material of text by statements called argument?
  - 2. Of long or short dissertations at back of book with page references?
  - 3. References to other selections of a similar nature (allusions)?
  - 4. Title of selection from which cutting is made?
- C. Do they include brief notes of the author's life?
- D. Where found
  - a. At beginning of selection?
  - b. At close of a selection?
- XIV. *Foot-notes.*
  - a. Translation of a sentence or phrase in foreign language?
  - b. Quotation bearing upon subject?
  - c. Synonym for obsolete or unusual form?
  - d. Definition of same?
- XV. *Definitions.*
  - a. Comparative number?
  - b. Lengthy?
  - c. Concisely worded?
  - d. Of important words?
  - e. Of non-important words?
- XVI. *Suggestions to pupils.*
  - a. Many? b. Few? c. Helpful? d. Where found?
- XVII. *Questions.*
  - a. Many? b. Few? c. Testing? d. Provocative of thought? e. Logical sequence?
- XVIII. *Key or guide to pronunciation?*
- XIX. *Lexicon or pronunciation of new and difficult words.*
  - a. Number of pages?
  - b. Important?

- c. Non-important?
- d. Difficult?
- e. Obsolete?
- f. Not in general use?
- g. Foreign language?
- h. Diacritically marked?
- i. Definitions in same list?
- j. Authorities for pronunciation?

XX. *Division into lessons.*

- a. Well divided?
- b. Poorly divided?
- c. Practically no division made?

XXI. *Grading of lessons.*

- a. Well graded?
- b. Poorly graded?
- c. No attempt at gradation?

XXII. *Illustrations.*

- a. Number?
- b. List of masterpieces and illustrations?
  - 1. Length?
  - 2. Well paged?
- c. Quality
  - 1. Fine?
  - 2. Medium?
  - 3. Poor?
- d. Educative?
- e. Portraits of authors?
- f. Reproductions of noted pictures?
- g. Illustrations of noted statuary?
- h. Source given?
- i. Purely decorative without reference to the text?
- j. Historical?
- k. Two or three grouped?
- l. Where found
  - 1. On pages at beginning and close of book usually left blank?

2. At beginning of lesson?
3. Interspersed through the text?
- m. Head pieces
  1. Number?
  2. Quality?
- n. Tail pieces
  1. Number?
  2. Quality?

XXIII. *Print.*

- a. Size?
  1. Large?
  2. Small?
  3. Marked difference in type.
- b. Clear?
- c. Attractive?

XXIV. *Quality of paper.*

- a. Fine?
- b. Medium?
- c. Poor?

XXV. *Lists of new and difficult words.*

- a. Number of pages, if at close of book?
- b. Diacritically marked, accented and separated into syllables?
- c. Correct pronunciation in italics?
- d. Words and definitions combined?
- e. Notes for study, including lists of words, definitions and explanatory notes or suggestive questions?
- f. Where found
  1. At close of book?
  2. At beginning of selection?
  3. At close?

XXVI. *Index of writers.*

- a. Name?
- b. Date of birth and death?
- c. Titles of selections?

- d. Page whereon found?
- XXVII. *Titles of books that should be in the library.*
- XXVIII. *Difficulty.*
  - a. Sufficiently difficult?
  - b. Too difficult?
  - c. Not difficult enough?
- XXIX. *Used.*
  - a. As text?
  - b. As supplementary work?
- XXX. *Index.*
  - a. Number of pages?
  - b. Alphabetically arranged?
- XXXI. *For what age?*
- XXXII. *For what grade?*
- XXXIII. *Favorable criticisms?*
- XXXIV. *Unfavorable criticisms?*
- XXXV. *Problems before the teacher?*
- XXXVI. *Psychological aspect of reading?*



## CHAPTER VII

# Review Questions on the Texts of Readers Examined

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1. Which has the most attractive cover?
2. Which the least attractive?
3. Which the longest preface?
4. Which the shortest?
5. Which the most inspiring one?
6. Which the most psychological?
7. Which gives six important features concerning the quality of the literary selections?
8. Which sets forth the predominating characteristic of the contents in each book of the set?
9. Which state the principles of teaching reading?
10. Which in your judgment is best?
11. Which contain acknowledgment of permission to publish?
12. Which contain acknowledgment of aid?
13. Which contain the names of critics?
14. Which has an introduction?
15. Which has the best table of contents?
16. Which have suggestions to teachers?
17. In which are the suggestions to teachers especially pedagogical?
18. Which treats of faults teachers should seek to correct in the child?
19. Which has the best suggestions to teachers?
20. Which have suggestions to pupils?
21. In which does prose predominate?
22. In which poetry?
23. In which are prose and poetry interspersed?
24. In which is the work of authors grouped?

25. In which are subjects having the same ethical motive grouped?
26. Which have an index of writers?
27. Which have lists of authors and their selections?
28. Which have the author's name in connection with the selection?
29. In which are sketches of the authors' lives found?
30. Which contain authors of the highest rank?
31. Which contain the most classical selections?
32. Which publishes complete selections in order not to encourage scrappy reading?
33. Which is constructed according to the culture epoch theory?
34. Which set seeks to appeal to the interests of the child at his special stage of development?
35. In which are types presented?
36. In which is the language used that of children in conversation?
37. Which text contains Mother Goose Rhymes?
38. Which first readers contain script?
39. Which first readers have the lessons numbered?
40. Which texts have material used to fill in space?
41. In which is there printed a suitable selection inside the cover?
42. In which are the memory gems especially fine?
43. Which correlates language lessons with reading?
44. Which correlates geography with reading?
45. Which correlates history with reading?
46. Which contains historical and biographical stories that later will correlate with other studies?
47. Which plans to supplement the text with outside reading on the same topic?
48. Which contains a model for the study of a poetical masterpiece?
49. Which have references to other selections of a similar nature?

50. In which is the material such as to create interest?
51. In which is it sufficiently difficult?
52. In which is it too difficult?
53. In which is it not difficult enough?
54. Which seem best adapted to the grade for which they are intended?
55. Which exemplify the spiral system?
56. Which has explanatory notes?
57. Which have foot notes?
58. Which has the best definitions?
59. Which have questions?
60. Which have testing questions?
61. Which have those provocative of thought?
62. Which have a key or guide to pronunciation?
63. Which have lists of new and difficult words?
64. Which have a lexicon or pronouncing vocabulary?
65. Which have the lessons well divided?
66. Which poorly divided?
67. Which make no division into lessons?
68. Which have the lessons well graded?
69. Poorly graded?
70. Which make no attempt at practical gradation?
71. In which are there lists of illustrations?
72. In which are there illustrations on the title page?
73. Which has the finest illustrations?
74. Which the poorest?
75. In which are they purely decorative?
76. Which has the best portraits of authors?
77. Which have historical illustrations?
78. In which are two or three pictures grouped?
79. In which are there headpieces?
80. In which tailpieces?
81. Which have great difference in type?
82. In which is the print small?
83. In which is it most attractive?
84. In which is it clearest?

85. Which have the best quality of paper?
86. In which do the lessons not begin at the top of the page?
87. Which book has the best index?
88. Which have a list of books that ought to be in the library?
89. What style of literature predominates in Brumbaugh's Standard First Reader?
90. In the First Reader in the Stepping Stones to Literature?
91. In Book One in Lights to Literature?
92. In the First Reader in the Progressive Course in Reading?
93. In the First Book on the graded Literature Readers? Readers?
94. In Jones' First Reader?
95. In the First Year of the Baldwin's Readers?
96. In Book I. of Heart of Oaks Books?
97. In Brumbaugh's Standard Second Reader?
98. In the Second Reader of Stepping Stones to Literature?
99. In Book Two of Lights to Literature?
100. In the Second Book of the Progressive Course in Reading?
101. In the Second Book of the Graded Literature Readers? Readers?
102. In Jones' Second Reader?
103. In the Second Year of School Reading by Grades? Grades?
104. In Book II. of Heart of Oak Books?
105. In Brumbaugh's Standard Third Reader?
106. In the Third Reader of Stepping Stones to Literature? erature?
107. In the Third Reader of Lights to Literature?
108. In the Third Book of the Progressive Course in Reading?

109. In the Third Book of Graded Literature Readers?
110. In Jones' Third Reader?
111. In the Third Year of Baldwin's Readers?
112. In Book III. of Heart of Oaks Books?
113. In Brumbaugh's Standard Fourth Reader?
114. In the Fourth Reader of Stepping Stones to Literature?
115. In the Fourth Reader of Lights to Literature?
116. In the Fourth Book of the Progressive Course in Reading?
117. In the Fourth Book of Graded Literature Readers?  
Readers?
118. In Jones' Fourth Reader?
119. In the Fourth Year of Baldwin's Readers?
120. In Book IV. of Heart of Oaks Books?
121. In Brumbaugh's Standard Fifth Reader?
122. In a Reader for Fifth Grades in Stepping Stones to Literature?
123. In the Fifth Reader of Lights to Literature?
124. In the Fifth Book of the Progressive Course in Reading?
125. In the Fifth Book of Graded Literature Readers?
126. In Jones' Fifth Reader?
127. In the Fifth Year of Baldwin's Readers?
128. In Book V. of Heart of Oaks Books?
129. In a Reader for Sixth Grades in Stepping Stones to Literature?
130. In the Sixth Book of Graded Literature Readers?
131. In the Sixth Year of Baldwin's Readers?
132. In Book VI. of Heart of Oaks Books?
133. In a Reader for Seventh Grades in Ctepping Stones to Literature?
134. In the Seventh Book of Graded Literature Readers?  
Readers?
136. In Book VII. of Heart of Oaks Books?

- 137. In a Reader for Higher Grades in Stepping Stones to Literature?
- 138. In the Eighth Book of Graded Literature Readers?
- 139. In the Eighth Year of Baldwin's Standard Readers?

## CHAPTER III

English

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*Definition of Language Study.*

Language study teaches a child the correct use of the mother tongue in speaking and writing. It is preparatory to grammar and in one sense is grammar but is not so called because the latter is much more technical and because to many a child the word grammar suggests a study to be dreaded because of its difficulty.

*When Teach Language?*

As soon as the child enters school, language may be taught by means of conversational lessons upon subjects that are familiar and interesting.

*The Basis of Language Study.*

Nature study, literature, including English and foreign classics, history, art, including masterpieces in sculpture and painting and geography, may be made the basis of language study.

*Correlation of Language With Other Studies.*

The connection between language and reading is very close.

Language may also be correlated with nature study, geography, drawing and manual training.

If the general lessons are made interesting, language lessons will easily grow out of them.

*A Separate Period For Language.*

Each lesson should be a language lesson in the sense that the child's mistakes in speaking and writing should be corrected, but it is also well to have a period set apart which should be distinctively a language recitation.

*Reproduction of Stories.*

The oral reproduction of stories may begin in the first grade and increase in difficulty as the child advances and

is able to reproduce them in written form.

*When Use The Text?*

When the child is able to read understandingly and gain information from the book he may use a language text. This would probably occur in the third grade.

*Technical Grammar in the Language Book.*

While technical grammar should not predominate in the language book a limited amount may appear therein preparatory to the intensive study of grammar.

*Value of Language Study.*

It teaches the child

- I. To speak and write correctly.
- II. To be more fluent in expression.
- III. To enlarge his vocabulary.

*When Begin the Study of Grammar?*

At one time it was thought that when the child was able to read for information, which would be about the third grade, he was ready to begin the serious study of such texts as arithmetic, geography and grammar, but ripper judgment decrees that he shall not begin until the sixth or seventh grades, or even later.

*Why Study Grammar?*

I. Perhaps the best and most forceful reason that may be urged is that the child may be prepared to understand thoroughly English Literature.

II. Whitney says: "We study grammar that we may correctly, accurately and quickly determine all the thought in the English sentence and see every shade of meaning."

III. The intensive study of grammar should lead the pupil to improve the structure of his own sentences.

IV. An able authority states that grammar is one of the best subjects that can be studied for developing the reasoning power.

V. It produces swift, accurate, logical and independent thinking.



VI. It creates for the pupil a standard by which to correct his own speech.

VII. It places before him reasons for the standard given.

*Does Grammar Exercise the Reasoning Faculty?*

If grammar is taught correctly it does exercise the reasoning faculty to a marked degree. The judgment called for in analyzing and in deciding what part of speech a word is, often calls forth very deep reasoning on the child's part.

*The Thought Relations of Words.*

This signifies the relation which one word bears to another in the sentence. The relation of subject and predicate, of the modifiers of each, and of phrases and clauses, are included under this.

*The Place Relation of Words.*

This signifies simply the place or space which a word occupies in the sentence.

*Is Grammar a Thought or a Fact Study?*

Many teachers have required the pupil to spend the major part of his time studying facts, memorizing rules and definitions and have called that grammar.

If grammar is properly taught it should be made emphatically a close study of thought relations.

To interpret other studies the child needs to see the thought relations existing between words and he can be led to see these relations through the study of grammar, which is an intense thought study when presented as it should be. In fact an eminent authority has said that in all probability it is more of a thought study than arithmetic.

The training that comes from the study of grammar is invaluable, since if the mind is rightly developed it may lead to the study of logic.

*How Grammar May be Made a Thorough Study.*

It is essential that there should be formal drill in the

parts of speech and their uses, but if grammar is to be made such a delight to the child as to become one of the most fascinating of his studies, the connection between it and literature must be a vital one.

If sentences, different from those found in the grammar, are placed upon the board for study, if the child is made to see that he is studying books rather than texts and above all if he studies beautiful and uplifting thoughts clothed in words of beauty, the study of grammar may appeal to him in an altogether different light from the way in which it ordinarily does.

*Is Grammar an Inductive or Deductive Study?*

As ordinarily considered, it is a deductive study, but its effects are far more beneficial when considered inductively.

The ordinary grammar a few years ago was arranged on this wise:

1. The definition.
2. The illustration.
3. Sentences for practice usually formed according to the same model.

The modern method is:

1. Questions that will lead the child to formulate the definition.
2. The definition.
3. Illustration.
4. Sentences for practice which are interesting, varied, and such as demand thought from the pupil.

If the sentences are to demand deep thought on the child's part they must be varied. There may be enough sentences to illustrate the special case, but there should be also sentences of kinds previously studied to call forth studious effort.

These sentences may be taken from history and literature as is customary in the German schools, and be such as will impart information.

*How Insure Correct Speech?*

While it would seem plausible that the child who has always been surrounded by people speaking correct English would be more likely to use it himself, this does not follow by any means, nor does it follow that a thorough knowledge of grammar will secure correct speech.

In the case where parents do not use correct English we cannot be certain that example, instruction or knowledge of principles and rules will avail, for it is said that "the parents' example will often set to naught the teacher's example."

*How Interest the Child in Using Correct Speech?*

1. By placing before him a fine model.
2. By bringing to his notice literary productions of a high order that interest him.
3. By criticising his mistakes so tactfully that he will not be discouraged, but will be incited to greater effort.
4. By impersonal criticism of mistakes made in current conversation.
5. By appealing to the child's desire to use correct English because it is the standard of the educated.

*Why a Teacher Should Have Command of Good English.*

To be a good conversationalist means not simply to be voluble, but to speak to the point, without repetition, in few and choice words.

The ambitious teacher should have within herself the desire to use the purest English possible because it is the standard of education.

It is of special advantage to the teacher to have a good command of language, because:

1. Of necessity the average teacher is forced to talk the major part of the time each school day from nine o'clock until four.
2. Whether she wills it or not, whether her English is

good or poor, whether she uses slang or not, she will be copied by the pupils.

3. She commands more respect from her pupils if she speaks correctly, since it is the insignia of a good education.

4. She may aid in enlarging the pupil's vocabulary.

5. She must know English well in order to criticise adequately the oral and written work of the pupil.

6. She needs to:

- a. Question skillfully.
- b. Explain clearly.
- c. Illustrate aptly.
- d. Describe vividly.
- e. Draw distinctions closely.
- f. Convince thoroughly in argument.

7. She must lead the pupil skillfully to formulate rules and definitions.

8. She must use good English if she wishes to give pleasure and make lasting impressions upon those with whom she comes in contact.

#### *Correction of Errors in Expression.*

It is well to have definite exercises for the correction of errors in expression, either selected by the teacher from the conversation of the pupils, or by the pupils from expressions which reach their ears. If these are corrected orally in an impersonal manner, as it is perfectly easy to do, it may prove of great value because grammatical knowledge may be as firmly fixed in this way as in any other. If the models placed before the child in speaking and writing are correct it would seem that his tendency would be to speak and write correctly himself. For this reason, while the oral correction of sentences may prove beneficial, incorrectly written sentences should be placed before the child but seldom, and then only when his habits of expression are practically formed.

*Why the Child Dislikes Grammar.*

The child dislikes grammar because :

1. He doesn't understand it.
2. It isn't made interesting to him.
3. It isn't well taught.
4. He doesn't see what good it will do him.

In other words, there is not the proper connection made between the study of grammar and his life. It is the experience of many a pupil that after a foreign language, such as Latin, with its intricate constructions and intensive work in grammar has been studied, English grammar, which heretofore had been a closed book, became suddenly capable of being understood and enjoyed.

5. Parents do not always see the necessity for it.

6. The teacher has required the child to memorize rules and definitions and has called that grammar, when it is only an infinitesimal part of it.

7. The tradition is handed down from class to class and from pupil to pupil that it is "hard" and therefore to be dreaded.

*The Complaint of the High School Teacher of English.*

The high school teacher of English complains that the child is not properly grounded in the rudiments of grammar, and that the grade teacher has not done her work with sufficient thoroughness so that he has an adequate foundation for high school work.

Parts of speech, which may be called the substantials of grammar, should be learned in the grades so that they will not be forgotten. The child should understand especially the active and passive verbs and know how to use them. He should be taught to separate the essentials from the non-essentials. If the high school and the grade teacher should visit each other and compare notes, and if the child be allowed to use his grammar in the high school to consult it occasionally and thereby refresh his memory, there

might be less complaint made by the high school teacher.  
*The Use of Dictionary and Encyclopedia.*

If the child is required to consult the dictionary and encyclopedia for the better understanding of a word, phrase or sentence, it would make him consider the thought relations, broaden his study of grammar and create in him the studious habit of going to the foundation of matters.

*Why the Child Tires of the Written Exercise.*

The child tires of the written exercise because:

1. The oral work requires so much less downright drudgery than the written work, and the average pupil does not like to delve.
2. He is required to produce so many written exercises.
3. He is not given interesting subjects to write upon.
4. Often the written exercise isn't handed in, he is not required to make a recitation upon it in class, no reference is made to it, or comments offered upon it, and no incentive to his ambition is offered in having his work compared with that of others.
5. Of its unvaried monotony.

*Formulating the Definition.*

It is difficult to formulate a definition, for it is a generalization of what has preceded, and in making it, the essentials must be included and the non-essentials excluded.

The definition should be clearly worded and should contain the best words to express the exact thought.

The child should be led step by step, as is the custom in the German schools, to formulate the definition himself, because:

1. It is by this means that he is taught to reason inductively.
2. His self-activity is aroused to a high degree, since to form the generalization well means a decided advance in thinking.

3. He will remember the definition longer if he formulates it himself, for if the exact words are forgotten and he has the idea he can repeat the process of reasoning and reform it at will.

### *Diagramming.*

If the pupil used the diagram simply as a means to an end, and diagrammed to obtain a mental picture of the relations of words in the sentence as a foundation for better analysis, it would undoubtedly be of value to him.

It may serve as a device to help the teacher, since in a large class she can see at rapid glance just how each pupil regards the sentence under consideration. A few of the reasons why it does not seem desirable to diagram are:

1. The place instead of the thought relations of words are emphasized.
2. A pupil who is able to diagram a sentence may be unable to analyze.
3. It may be so used as to be a positive hindrance to further advancement, for many a pupil stops short at diagramming, feeling that his work is completed when that is accomplished, when in truth he is just at the point where the intricate work of analysis should begin.
4. Attention is focused upon forming and placing the lines and writing the words upon the lines rather than upon the thought of the sentence.

### *The Dread of Composition.*

The average child dreads composing, because:

1. He is not familiar with the subject upon which he is to write.
2. He is not interested in it.
3. It is beyond his capacity.
4. He was not properly trained in writing in the lower grades.



## CHAPTER IX

Questions on English

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1. What is language study?
2. To what is it preparatory?
3. Why is it not called beginning grammar?
4. What is the difference between language and grammar?
5. When begin to teach language?
6. When cease?
7. What may be made the basis of language study?
8. With what studies may language be correlated?
9. How correlated with these?
10. Should language lessons grow out of general lessons?
11. Should there be a separate recitation for language?
12. Should every lesson be a language lesson?
13. In what grade should reproduction stories be used?
14. When is the best time for the language recitation?
15. What are good texts in language?
16. When should the child begin to use the text book in language?
17. Should the language book contain technical grammar?
18. What should the study of language do for the child?
19. When begin the study of grammar?
20. When cease?
21. Why study grammar?
22. Does it exercise the reasoning faculty?
23. What part of reason requires the greatest sagacity?
24. How is grammar peculiarly fitted to train the powers of observation?
25. What is meant by the place relations of words?
26. What is meant by the thought relations?
27. Is grammar a thought or a fact study?



28. How does it compare with history, geography and psychology as a thought study?

29. Of what value are the facts of grammar?

30. What is the difference between a content and a form study?

31. Should formal drill in the parts of speech and their uses predominate, or should there be a vital connection between literature and grammar?

32. What are the studies immediately succeeding grammar?

33. What is the difference between a logical and a psychological concept as applied to grammar?

34. To what does the study of grammar lead?

35. Is grammar an inductive or deductive study?

36. What are good texts to use in grammar?

37. Will the child who has always been surrounded by people speaking correctly, use correct English?

38. Is he more likely to do so?

39. What is true of the parents' example?

40. Does a thorough knowledge of grammar insure correct speech?

41. Why?

42. How would you interest the child in using good English?

43. How may the habits of incorrect speech be overcome?

44. Why should a teacher especially have command of good English?

45. What is the value of grammar as a corrective discipline?

46. Should there be definite exercises for the correction of errors in expression?

47. Should they be made up?

48. Should they be selected from the daily world of the pupils?

49. How can mistakes be corrected best?

50. What is the value of this exercise?
51. Does it deprive technical grammar of any time?
52. Should incorrectly written sentences be placed before the child for correction?
53. At what age is it safe?
54. Why does the child dislike grammar?
55. What aid does the study of a foreign language render here?
56. What should the child's knowledge of grammar be when he enters the high school?
57. Should grammar be studied in the high school?
58. Of what does the high school teacher of English complain?
59. What use should be made of the dictionary and encyclopedia?
60. Why does the child tire of the written exercise?
61. Would you ask for written work you do not expect to examine?
62. To which should the most time be given:
  1. To the analysis of sentences?
  2. The classification and modification of the parts of speech?
63. Why should analysis stand at the beginning of any logical grammar?
64. Why is it difficult to formulate a definition?
65. Who should formulate the definitions?
66. Why?
67. Of what value is the formulation of the definition?
68. By whom are they formulated in the German schools?
69. What kind of reasoning is taught by formulating the definition?
70. Should the child diagram?
71. Of what value is it?
72. What are the arguments against it?
73. What are the difficulties in the study of grammar?

74. Of what did the method in the ordinary grammar consist a few years ago?

75. What is the modern method?

76. How often should the child be given a lesson in letter writing?

77. What may be made the subject of letters?

78. How may this exercise be varied?

79. Why does the average child dread composition?

80. How can the child be induced to think deeply?

81. Could grammar be made of as much disciplinary value as arithmetic or the languages?

82. What is the principal disciplinary value of grammar?

83. What are good devices in grammar?

## CHAPTER X.

Outline for Study of Text in English

---

V. *Preface*

- a. Number of pages?
- b. Comparative length?
- c. Main heads?
- d. Are they definitely brought out?
- e. Comprehensive?
- f. Purpose of book stated?
- g. Clearly set forth?
- h. Names of critics given?
- i. Acknowledgment of aid?

VI. *Acknowledgment of permission to publish?*

Where found

- a. Preface?
- b. Close of selection?

VII. *Article on the English language?*VIII. *Development of the English language?*IX. *Elements of English Grammar?*X. *Introduction.*

- a. Length?
- b. Main theme?

XI. *Contents.*

- a. Comparative length?
- b. Number of lessons?
- c. Divided into parts?
- d. Chapter indicated?
- e. Page indicated?

XII. *List of Authors.*

- a. Where found?
- b. Authors of highest rank?
- c. Modern authors ranking well?

XIII. *Suggestions to teachers.*

- a. Where found.

- b. Helpful?
- c. Sufficient number?

XIV. *Suggestions to pupils.*

- a. Comparative number?
- b. Helpful?
- c. Practical?
- d. Where found?

XV. *Material of Text.*

1. *Upon what based?*

- a. Nature study?
- b. Classics?
- c. Fine literary selections?
- d. Facts of history?
- e. Poems?
- f. Occupations of men?
- g. Fables?

2. *Examination of text.*

- a. Inductive?
- b. Deductive?
- c. Logically arranged?
- d. Has emphasis been laid on the thought relations of words?
- e. Is it practical?
- f. Does it refer to the every-day life and thought of boys and girls?
- g. Any very lengthy selections?

3. *Arrangement of material.*

- a. Logical sequence?
- b. Kindred subjects grouped?
- c. Lessons of same nature interspersed through text?
- d. Topical?
- e. Spiral?

4. *Story.*

- a. Begun?
- b. Unfinished?

- c. For paragraph revision?
- d. From pictures?
- e. From topical outline?
- f. From brief hints?
- 5. *Letter writing.*
  - a. Number of lessons on this subject?
  - b. How fully treated?
  - c. Section upon letter writing?
  - d. Parts of a letter defined?
  - e. Letter forms?
  - f. Letters of friendship?
  - g. Business forms?
  - h. Business transactions?
  - i. Invitations?
  - j. Replies?
  - k. Telegrams?
- 6. *Study of*
  - a. A word picture?
  - b. Meaning of words?
  - c. Quotations?
- 7. *Exercises.*
  - a. Comparative number?
  - b. How often found?
  - c. Where found?
  - d. Oral?
  - e. Written?
  - f. Dictation?
  - g. In composition?
  - h. In copying sentences and filling blanks?
  - i. For finding different forms?
  - j. Which kind predominates?
- 8. *Miscellaneous.*
  - a. Biographies of famous painters?
  - b. Selections to be committed to memory?
  - c. Descriptions?
  - d. Article on the nature of ideas?

- e. Article on the nature of thoughts?
  - f. Turning sentences into other forms?
  - g. Grouping?
  - h. Synonyms?
  - i. Names?
  - j. Proverbs?
  - k. Strictly grammatical?
- 9. Are copies or patterns provided in sufficient quantity?
  - 10. What kind of lessons predominate in book?
  - 11. Which predominates (1) prose? (2) poetry?
  - 12. Is there too much sameness to the lessons?
  - 13. Are chapters well numbered in blacker type?
  - 14. Are main heads well brought out?

XVI. *Rules.*

- a. Comparative number?
- b. How developed?
- c. After development are they grouped?
- d. In blacker type?
- e. In italicized print?
- f. Where found?

XVII. *Definitions.*

- a. Comparative number?
- b. How reached (1) inductively? (2) deductively?
- c. Entire wording in blacker type?
- d. In italicized type?
- e. Principal word italicized?
- f. In which part of the book most prominent?

XVIII. *Questions.*

- a. Comparative number?
- b. How often found?
- c. Testing?
- d. Provocative of thought?
- e. Logical sequence?
- f. Are questions asked for teachers' aid answered?

XIX. *Reviews.*

- a. Simply drills upon what has been previously gone over?
- b. A new view of an old subject?
- c. Frequent?
- d. How often occur?
- e. Contain important features?
- f. Non-important features?

XX. *Summaries.*

- a. Comparative number?
- b. Contain essentials?
- c. Non-essentials?

XXI. *Explanations.*

- a. Comparative number?
- b. Lengthy?
- c. Short?
- d. Clear?
- e. Confusing?
- f. Adequate?

XXII. *Pronunciation of difficult words.*

- a. Number of pages?
- b. Important?
- c. Non-important?
- d. Diacritically marked?
- e. Separated?
- f. Accented?
- g. Where found?

XXIII. *Devices.*

- a. Comparative number?
- b. Varied?
- c. Practical?
- d. Where found?

XXIV. *Nomenclature.*

- a. Universally intelligible?
- b. Of long-continued usage?
- c. Technical?



- d. Substitutes?
- e. Unusual terms?
- XXV. *References to the Dictionary.*
  - a. Comparative number?
- XXVI. *Division into lessons.*
  - a. Well divided?
  - b. Poorly divided?
- XXVII. *Grading of lessons.*
  - a. Well graded?
  - b. Poorly graded?
- XXVIII. *Illustrations.*
  - a. List of illustrations?
  - b. Number?
  - c. Quality—(1) Fine? (2) Medium? (3) Poor?
  - d. Educative?
  - e. Purely decorative without special reference to text?
  - f. Copies of old masters?
  - g. Copies of famous modern pictures?
  - h. Source given?
  - i. Portraits of authors?
  - j. Full of suggestion?
  - k. Do they suggest movement or action?
  - l. Continuous or progressive pictures?
  - m. Where found
    - 1. At beginning of lesson?
    - 2. Grouped at close of book?
- XXIX. Peculiar use of words and phrases?
- XXX. How words have grown?
- XXXI. Prefixes and suffixes?
- XXXII. Root words?
- XXXIII. *Seat-work?*
- XXXIV. *Appendix.* a. Length? b. Of what consist?
- XXXV. *Index.*
  - a. Well arranged?
  - b. Alphabetical order?

- c. Arranged for correlation?
- d. Important subjects worked out fully?
- XXXVI. For what age?
- XXXVII. For what grade?
- XXXVIII. Unusual features of book?
- XXXIX. Favorable criticisms?
- XL. Unfavorable criticisms?
- XLI. Problems before the teacher?
- XLII. Psychological aspect?

## CHAPTER XI

# Review Questions on English Texts

## Examined

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1. Which acknowledge permission to publish?
2. Which acknowledge aid?
3. Which devotes a special topic to the English language, or the development of the English language?
4. Which has the best introduction?
5. Which has the best table of contents?
6. Which contains a list of authors?
7. Which are based upon nature study?
8. What text bases the study of grammar upon fine literary selections?
9. Which strive to correlate grammar and literature?
10. Which contain fine literary selections?
11. Which contain information even in the shorter sentences?
12. Which contain short quotations from the masterpieces?
13. Which contain the names of authors in connection with the selections?
14. In which does prose predominate?
15. In which poetry?
16. Which are treated inductively?
17. Which deductively?
18. Which is the most logically arranged?
19. In which has emphasis been laid on the inner content of language?
20. Which has studies for thought analysis?
21. Which contain lessons of practical value in life?
22. Which has comparatively long selections?
23. Which are constructed on the topical plan?
24. Which on the spiral plan?
25. Which has the best suggestions to teachers?

26. Which has the best suggestions to pupils?
27. In which are fables found?
28. Which contain story work?
29. Which contains the best exposition of letter-writing?
30. Which has the study of a word picture?
31. Which contain the most varied exercises?
32. Which has the best exercises for composition?
33. Which contain the best models?
34. Which contain few rules?
35. Which have the best rules?
36. In which are they grouped throughout?
37. Which have them grouped at close of text?
38. Which contain the best definitions?
39. In which are they grouped?
40. Which have the best principles?
41. Which has many questions?
42. Which has few?
43. Which contain testing questions?
44. Which contain those provocative of thought?
45. Which contain frequent reviews?
46. Which present reviews in a new light?
47. Which have summaries?
48. Which has the best summaries?
49. Which contain the best explanations?
50. In which are the difficult words pronounced?
51. In which are many devices found?
52. Which has the most varied nomenclature?
53. Which contain selections to be committed to memory?
54. Which strive to conform to ordinary usage in the matter of technical terms?
55. Which has the finest illustrations?
56. Which have pictures that are educative because they illustrate the subject?
57. Which contain progressive pictures—one growing out of another?

58. Which language books contain pictures that suggest movement and action?
59. Which have copies of famous masterpieces?
60. In which are there biographies of famous painters?
61. Which has the best appendix?
62. Which has the best index?
63. Which have important subjects worked out fully in the index?
64. Which have an index of authors?
65. Which state the grades in which it is to be used?
66. In which are there references to other books?
67. Which contain references to the dictionary?
68. Which contain errors to be corrected?
69. Which emphasize the use of the diagram?
70. In which is there a brief statement of the purpose before each selection of the book?
71. Which contain sufficient supplementary material?
72. Upon what is the elements of English grammar by Brown & De Garmo, based?
73. Upon what is De Garmo's Language Lessons, Book I., based?
74. Upon what is De Garmo's Lessons, Book II., based?
75. Upon what is the Mother Tongue, Book I., based?
76. Upon what is the Mother Tongue, Book II., based?
77. Upon what is Gordy & Mead's Language Lessons, based?
78. Upon what is Gordy & Mead's Grammar Lessons, based?
79. Upon what is Foundation Lessons in English by Woodley & Woodley, based?
80. Upon what is Foundation Lessons in English Language and Grammar by Woodley & Carpenter, based?
81. Upon what is New Lessons in Language by Southworth & Sanborn, based?
82. Upon what is English Grammar and Composition by Southworth & Sanborn, based?

83. Upon what is the Webster-Cooley Language Series, Book I., based?
84. Upon what is Webster-Cooley Language Lessons and Elementary Composition, based?
85. Upon what is Lyte's Elementary English, based?
86. Upon what is Lyte's Elements of Grammar and Composition, based?
87. Upon what is Lyte's Advanced Grammar and Composition based?
88. Upon what is Reed & Kellogg's Graded Lessons in English, based?
89. Upon what is Reed & Kellogg's Higher Lessons in English based?

## CHAPTER XII

## Arithmetic

*When begin the study of number?*

It is customary to teach the child number as soon as he enters school, because of public sentiment.

If this subject should be postponed and he should be given work preparatory to, and along the same line as number to develop his mind until he had been in school for a while, he would probably gain an advantage, for he would be better able to use his reason and judgment later and would doubtless be as far advanced in the end as if he had studied number from the beginning of his school life.

*The Use of Objects.*

Objects should be used to teach the beginning lessons in number.

They should not be of such a nature as to attract attention to themselves, but such as would make number relations more clearly understood.

The uncolored, one-inch cube is best for class work because:

1. It is of convenient size for the child to handle.
2. It is the standard of measure.

Uncolored shoe pegs may be used for seat work.

*What Teach the Child the First Year, Second Year and Third Year?*

Some teachers would teach from

- 1 to 10 the first year.
- 10 to 20 the second year.
- 20 to 100 the third year.

Others would teach from

- 1 to 10 the first year.
- 10 to 100 the second year.

100 to 1,000 the third year, so as to emphasize the decimal feature.

D. E. Smith would teach  
 1 to 12 inclusive the first year.  
 1 to 1,000 the second year.  
 1 to 10,000 the third year.

This occurs in his "Course of study prepared after a long and careful study of the best courses that are at present in use in the educational centers of the United States."

### *When Use the Book?*

When the child is able to handle the book intelligently and gain information from the printed page, which would be about the third grade, he should use a text in arithmetic.

One authority says, by the middle of his second school year, he can use the text.

### *Synthesis.*

The word synthesis is derived from two Greek words and means to put together.

Synthesis includes addition and multiplication.

### *Analysis.*

The word analysis is also derived from two Greek words and signifies to unloose or take apart.

Subtraction and division are included under analysis.

### *The Incidental Teaching of Arithmetic.*

By the incidental teaching of arithmetic is meant that no separate recitation period is given to the subject of arithmetic, but that whenever a subject under discussion will permit of an arithmetical trend the teacher plans beforehand, with the greatest care, to give it one.

When a principle is once brought up, it is to be taught with the thoroughness that it would receive if it was considered in the period set apart for arithmetic.

### *Accidental Teaching.*

The accidental teaching of arithmetic means that no period would be set apart for arithmetic, and that the teacher would not plan to give the subject an arithmetical turn, but if a pupil asked a question pertaining to arithmetic the



teacher in answer, would teach the subject whatever it might be, thoroughly and well.

The difficulty in this case would be, that if pupils did not chance to ask mathematical questions the subject of arithmetic would be almost altogether slighted.

While good results might be obtained by incidental teaching in the hands of a skillful worker, the outcome of accidental teaching would be neither particularly beneficial nor practical.

*With What Subjects Might Arithmetic be Correlated if Taught Incidentally?*

Arithmetic might be correlated with geography, reading, history, drawing, manual training, language and nature study.

*The Educational Value of Arithmetic.*

*White says:*

The chief aim of training in arithmetic from the first, should be to impart rapidity and accuracy in all processes.

It should give a clear grasp of number relations.

*Jackman says:*

Arithmetic gives accuracy, exactness and vividness to ideas.

It renders hazy notions clear.

It evolves the definite from the indefinite.

*Roark says:*

Arithmetic cultivates originality and precision of thought.

It teaches exactness in analysis.

It teaches quickness and correctness in the manipulation of figures.

It teaches increased neatness of written work done according to prescribed forms. (A matter of sufficient importance to justify far more attention than it usually receives.)

*Fitch says:*

Arithmetic is a discipline in closeness and continuity of thought.

It teaches the child to think consecutively, closely and logically.

It serves as a training in elementary logic.

It teaches rapidity.

It teaches concentration of effort.

*Alger says:*

The purpose of arithmetic is to enable the child to understand the meaning of life's problems through:

First. Sense experiences.

Second. By suggestion through the use of the fundamental processes.

It cultivates the ability to determine the quantitative relations of facts, not only in connection with business, but with all the facts of that description with which the mind has to do.

*In Actual Life Why Do We Need Arithmetic?*

Each individual needs it in obtaining commodities.

Unquestionably the business man needs it.

The householder needs it in carrying on his occupation in life, whatever that may be, in caring for his family and providing for his household and in all his financial relations.

The housewife needs it in purchasing her supplies, in dealing with those whom she may employ, her servant, her seamstress, in her social relations and in keeping her personal accounts.

*"Culture Value" of Arithmetic.*

By "culture value" is meant that knowledge which broadens the pupil and makes him a more intelligent human being and a more useful citizen.

Literature, history, geography and similar subjects impart culture value by broadening and developing the pupil in innumerable ways.

So much of life is concerned with the relation which man bears to man that such subjects as these give the pupil the necessary understanding of such relations.

Undoubtedly arithmetic broadens and develops the pupil, but it is questionable whether it does to the same degree that the above-mentioned subjects do.

Arithmetic is simply a means to an end. The pupil understands certain subjects in literature, history and geography better, because of his knowledge of arithmetic.

He needs arithmetic to solve the problems his other experiences bring up.

It has its place, but some authorities feel that too prominent a position has been given to it in our curriculum in the past. When one employs his leisure hours with a book, it is the rare individual who studies arithmetic as a diversion. When man meets man in discussion, unless it be a purely business engagement, the topics under discussion would, under ordinary circumstances be, current affairs in country, state or town, or some leading article which had lately been published.

Arithmetic might also be called the middle-man. He is essential and yet we use him as a medium to understand other things.

*Which Instill Into Pupils—What Arithmetic is or What it Will Do?*

Most decidedly the latter.

Arithmetic is a worker and a servant, we need to use him for the purpose of discovering something that will serve our ends in some way.

*Facts or Processes?*

Such a subject as addition or interest should be considered finished when the pupil knows the facts, rather than when he has mastered the processes.

The process is necessary, for the problem cannot be performed without it, but the fact is the essential thing to be sought. The process is just a crutch to lean upon to find out the fact.

If A owes you \$736 and B owes you \$897 your interest is to know the amount of the indebtedness of both to you.

Page after page in the arithmetic has been consumed with the process. If more of the problems, with which the process is concerned, should be given it might be made more of a thought and less of a mechanical study.

*Of What Value is it to First Solve Problems by Indicating a Number of Operations and then Performing the Operations Indicated?*

It is of the greatest value, for this is the work that demands the child's greatest self-activity and his highest thought power, the rest is simply a mechanical process which anyone who has a knowledge of the fundamentals can perform.

*Should the Child be Stimulated to Further Investigation?*

Most emphatically. This would be one of the surest ways of interesting him in the subject of arithmetic.

It would make him see the connection between arithmetic and the facts of his life in a very satisfactory way and might serve to broaden his knowledge of the manifold phases of life with which he comes in contact.

The material which the book contains is a task set him by others. The problem which he originates is a self-imposed task, one always performed more willingly than that imposed by another.

Perhaps the highest office a teacher can render a pupil is to so direct his self-activity that he may become an originator, a discoverer, a producer, and surely investigation would be a step in this direction.

Problems concerned with the price of a plot of ground, e. g. the public park situated in the heart of the town, valued at thousands of dollars, even though land is of average cost, would make the child appreciate the city's sacrifice for the sake of ministering in comfort and beauty to its inhabitants.

If he forms problems with regard to a public building under construction, the architect's plans, the wood, stone, iron work, plumbing, and decorations, it would make him appreciate such a building as he could not otherwise.

Problems concerning the cost of the steamer he saw launched, of the cargo it would carry, and of the amount it would make per season, would broaden and interest him.

*Topical System.*

The topical system in arithmetic signifies that when a subject is considered, it is exhaustively treated and may perhaps not be referred to again in the text.

*Extreme Spiral System.*

The extreme spiral system indicates that a subject is considered only partially and recurs at regular intervals with a slight review and the addition of new and more difficult matter, until completed.

*Modified Spiral.*

The modified spiral differs only slightly from the extreme in that the subject recurs at irregular instead of regular intervals until completed.

*The Natural Order of Gaining a Knowledge of Forms and Processes.*

The natural order in which the mind gains a knowledge of forms and processes and uses them in practical experience is:

1. Simple numbers or integers.
2. Common fractions.
3. Decimals.
4. Percentage.
5. Applications of percentage.

*The Storage Theory.*

The storage theory means to teach the child such subjects as stocks and bonds for which he will have no immediate use, in the thought that some day it may be necessary for him to know about them.

This causes the child to study subjects which are not at all within the range of his experience, which do not interest him, which he does not use now, which there is a bare possibility of his using years hence or which he may never use.

It is not to be wondered at if he seeks outside aid or ap-

proaches such a subject in a half-hearted, perfunctory manner.

*The Present Use Theory.*

The advocates of the present use theory urge the teaching of such subjects in arithmetic as the pupil needs to comprehend those things with which he is brought in contact at the present time.

It is believed that if he needs to use in later life some neglected phase of arithmetic, he will be able to master it with much more concentration of mind and to much more purpose because there is urgent necessity to put it into immediate practice.

It is thought that the power of concentration gained from the studies he has pursued will enable him to accomplish this. If the pupil knew that in a specified time he would be obliged to teach the very subject in which he had been a pupil, he would bend his energies upon it with an entirely different spirit from what he would if he thought there was simply a possibility of teaching it some indefinite time in the future. A mature man, with a family depending upon him, employed in a lumber camp, was informed that he could occupy a higher position if he had knowledge of a certain mathematical subject. He devoted himself with all the power accumulated through years of life and experience to the study of this subject, conquered it quickly, for he felt the pressing need of it, and assumed the higher position creditably to himself and with profit to his employers.

*What Kind of Problems Should the Book Contain?*

The problems should be such as will develop and broaden the child's mind and yet give him sufficient practice in the necessary principles of arithmetic.

*Catch Problems.*

There is a notable absence of catch problems in some of the newer and later texts.

As a rule, there is no practical connection between problems of such a nature and the child's life, and there seems.

to be no special reason why he should solve them except that a certain kind of exhilaration comes from conquering a difficulty.

### *The Formation of Rules.*

The child himself, with the necessary aid of the teacher, should formulate the rules, for it teaches him to reason inductively. It is a more inductive way of teaching to so arrange the text that the rules are not the prominent feature but are either grouped at the close or omitted altogether.

Some of the best authorities say that the important thing is that the operation be performed correctly, it matters but little whether the rule is known or not.

### *Why no Rules?*

In the report of the Committee of Ten, p. 105, it reads: "So far as possible, rules should be derived inductively instead of being stated dogmatically. In this system the rules will come at the end, rather than at the beginning of a subject."

Colonel Parker once prophesied that the time would come when there would be an arithmetic containing neither rules nor definitions, and it would seem as if the modern trend of thought was tending that way.

### *Why No Definitions in Some Arithmetics?*

Definitions are not so prominent in some of the newer as in the older texts, and some contain no definitions whatever.

White says: "There should be only a few definitions and these should be taught inductively."

### *Should There be a Set Form for the Analysis of a Problem?*

Time was when the teacher gave a set form for the analysis of a problem and required the child to repeat it *verbatim* et *literatim*, the class also often reciting it in concert.

Today it suffices if the child below the fifth grade can give in his own words, an intelligent enough reason why he did thus and so, in order that the teacher may be satisfied that he understands it.



Beyond this grade the teacher may require more accurate work in analysis if she so chooses.

*The Solution of Problems Without Performing the Operations.*

Solving a problem without performing the operation is of great value to the pupil, for when this is done, the hard work, namely, the planning of the process which necessitates far greater brain power than performing the operation is completed.

What remains to do is only the mechanical part which even the unskilled can perform and implies simply a mastery of the fundamental operations.

The indication of operations is of aid to the teacher, for it is a good proof of the pupil's skill and proficiency.

*Should the Metric System be Taught?*

Certainly the metric system should be taught, for it is the one employed by scientists. If it was used all over the world it would simplify matters, especially in transactions between nations.

The pupil can comprehend the measurement of small quantities better by this system than by others.

The number ten which is employed so frequently in the metric system is easy for the pupil to remember.

Today many physicians use this system instead of the apothecaries' weight as formerly.

The amount of machinery exported from the United States is constantly increasing and it is demanded that the metric system be used in construction so that those who are to identify themselves with this work must understand this system.

*Algebra and Geometry in Arithmetic.*

Many of the new and progressive texts contain chapters in algebra and geometry.

Formerly when arithmetic contained neither of these, algebra and geometry seemed subjects apart by themselves; now the connection between the three can be made much



closer, and their interrelation can be made manifest as it could not formerly. The child often endeavored to solve arithmetical problems by algebra but was restrained and told to perform them by arithmetic.

Some texts recognize this tendency and suggest that algebra be used in the operation.

*How Much Algebra and Geometry Should the Arithmetic Include?*

It should include some of the simpler operations in algebra and geometry. These subjects should be arranged logically so that the pupil will see clearly the connection between them and arithmetic.

There should be enough lessons provided for so that the pupil will be given a start in each and yet not be led beyond his depth.

*Speed or Accuracy?*

One of the chief values of arithmetic is that it teaches the pupil to be accurate, and it is very essential that he be trained in this particular.

In fact it is much more necessary that he be accurate than that he be speedy, for the accurate pupil will often outstrip the speedy one.

Accuracy is the necessary foundation of speed, but the pupil needs the former first, last and all the time.

Speed is also desirable and is very essential in its place. It is said that "speed means habit" and it is well if the pupil can be taught to be quick, swift and speedy.

If he needs to acquire speed for some particular purpose he can accomplish this by himself but the teacher had better devote most of her energies toward teaching accuracy.

*Value of Estimates or Approximates.*

Estimates and approximates have a value of their own.

Even if one cannot take the time or does not choose to work the example through and carry it out to its fractional parts, the estimate or approximate often gives as clear an idea as is necessary for the purpose.

*Should the Text Contain Answers?*

The principle and not the result should be uppermost in the pupil's mind.

A bright and thorough pupil works as diligently as he can without consulting the answer because it is a delight to him to perform an arithmetical operation correctly.

The slow pupil will often hold the answer rather than the principle prominently in mind and if the former does not come by one process he tries any means which will bring the result, utterly regardless of the principle, indeed he often works backwards from the answer.

In ordinary practice, perhaps it is better to provide the younger pupils with answers and require the older and more independent workers to do without, proving their work to see if it is correct.

*When is the Best Period for the Arithmetic Recitation?*

Because arithmetic requires such mental effort the best time for the recitation is when the mind is clearest; and that, under ordinary circumstances, is the first period in the morning. If this time is used for the recitation then the study period must necessarily be the last thing the previous day and the pupil should be given a few moments for refreshing his memory before he recites.

*Why Has Such Stress Been Laid Upon Arithmetic in the Past?*

Because:

- I. It is practical and is needed in all callings in life.
- II. *It was believed:*
  - a. That through this "most ancient of all sciences" the pupil received the greater part of his mental discipline.
  - b. That through the study of mathematics the child was taught to reason logically.
  - c. That evidence of greater brain power was shown in the mastery of arithmetic than in that of any other subject.
- III. *Of sentiment of patrons.*
  - a. The average parent would rather have his child strong

in arithmetic than in any other subject, and desires him to be quick and accurate in the operation of his problems.

b. The parent often feels that if his boy understands arithmetic, it will enable him to make his way in the world of finance whether he comprehends other subjects or not.

#### IV. *Of the the pupil's attitude.*

a. The pupil likes to feel the consciousness of his power to overcome and master.

b. If he is grappling with a problem that he recognizes as worthy of his mettle, he is not willing to give up until he has conquered.

c. After long hours of struggle over a problem, a thrill of triumph and exhilaration comes when finally it is completed and the correct answer gained, such as rarely ensues when studying other subjects.

All this the pupil thoroughly enjoys.

#### V. *Of opinion of the world at large.*

a. To those capable of attaining it, money purchases the highest educational advantages attainable, also pleasures and the benefits of travel. A knowledge of arithmetic is one of the requisites necessary to accumulate money.

b. To the average man the material manifestation of wealth appeals. Material prosperity bears evidence that the knowledge of arithmetic aided someone in such accumulation.

c. Everyone likes to feel that consideration is paid him.

The world at large pays tribute to the man who has accumulated.

This implies a knowledge of mathematics.

#### *Is Too Much Time Given to Arithmetic?*

It is the opinion of some recognized thinkers that in the past, time has been given to arithmetic entirely out of proportion to that bestowed upon other subjects.

It is believed that the pupil would be broader and more cultured if he gave more of his time to such subjects as lit-

erature and history, which would make him better fitted to deal with men of the world.

*Should as Much Time be Devoted to Arithmetic as to Reading?*

The subject of reading is one that is begun when the pupil first enters school and is the one with which the individual, at all inclined to literary pursuits, has the most to do so long as life lasts.

The average mature person beguiles his leisure hours with some form of literature, not the study of arithmetic.

Since so much of his life is concerned with literature why not devote time enough to it so that he will understand it as a pupil and enjoy it thoroughly in after years?

*Elimination.*

There are those who think that the child should not waste his force upon subjects that are rarely or never used in practical life and that he might better gain the same amount of discipline through some study that would give him more culture than arithmetic, such as literature, history or geography.

They believe that time is actually wasted in problems that are of no real value to the child's life.

Dr. Wm. H. Maxwell, in the Educational Review, Vol. III., would eliminate cube-root, equation of payments, compound proportion, partnership, exchange, true discount, partial payments, bonds and stocks, and the greater part of what goes by the name of mensuration. He further states that cities that now give twenty-five per cent of the whole time of school to the teaching of arithmetic might with advantage cut that amount down to at least one-half."

Dr. J. P. Gordy, in his Broader Elementary Education states, that "a knowledge of the four fundamental rules, of simple and decimal fractions, of the simple applications of percentage, of simple interest and discount with a few of the simple rules of mensuration will suffice."

As eminent an authority as D. E. Smith of Columbia University, writes in his *Outlook for Arithmetic in America* that, "Our people as a whole, no longer care about the greatest common divisor, cube root, such common fractions as are not needed in practical business; about troy and apothecaries' weight, compound numbers beyond the merest elements, compound proportion, or, for that matter, about simple proportion, either.

Alligation, doudecimals, equation of payments, and partnership involving time, have finally been relegated to the arithmetical museum, and the good common sense of our people will demand that these other inheritances follow them."

*Why Do Some Children Dislike Arithmetic?*

Because:

I. It was not so taught in the beginning grades that the child was interested in it.

II. He was not well grounded in the fundamentals.

III. He does not understand it.

IV. He does not know how to read a problem so as to comprehend its requirements.

V. It is considered a difficult subject and he does not like to work hard.

VI. He is not capable of the concentrated efforts necessary to obtain the correct results.

VII. He is too easily discouraged.

VIII. He has not the gift of perseverance.

IX. The text is too difficult.

X. The subject is not connected with the facts of his life.

XI. He fails to see the necessity for some topics included in the text.

XII. Classmates are swifter in obtaining results and he becomes discouraged and thinks it is no use to try.

XIII. The teacher puts an entirely new example on the board to be solved and gives him no inkling of the principle involved or of the method of performing it.

XIV. He has placed such reliance upon the assistance of others that he is not so independent in his thinking as he should be.

XV. The teacher does not make clear explanations.

*How be Sure that the Pupil has Worked Independently?*

I. Send the pupil to the board alone and require him to perform the problem.

II. Call upon him for an explanation.

III. Demand his reasons for the process.

IV. Insist upon proof for the problem.

V. Assign him problems to perform on the board unlike those which he has worked in the study period but illustrating the same principle.

In spite of all this, he may have understood the help he received so well as to conceal the fact that he was aided when studying. Otherwise he would be likely under this probing process to betray his lack of independence.

*Should Pupils Work Problems Together?*

If pupils of the same degree of capability work problems together it may be beneficial.

When they desire to do this however, it is not usual for them both to possess the same degree of ability.

The weaker one may receive help from the stronger and gain an impetus which may inspire him to study harder, but he relies upon the former to such an extent that his self-activity is not sufficiently aroused to make him self-reliant and if he could but see it, he is really injuring himself, and destroying his power of originality.

When working the problem over again by himself, perhaps he may not even be able to solve it or give his reasons for the process. He may remember it long enough to make a creditable recitation in class, but cannot solve it afterwards because he did not think it out for himself in the first place.

When in recitation he can perform the problem in which he has been aided, he sometimes deceives the teacher, as to

his understanding of it and he does not receive the aid which he needs, and which would otherwise be given him.

In view of all this as a rule, it seems best that pupils should work independently.

*How Keep Pupils From Handing Down Note Books?*

To keep pupils from handing down note books :

I. If possible provide work that is new or different from that which other classes have had so that old note books will not aid the pupil.

II. Appeal to the owner's sense of honor.

III. Appeal to the pupil's sense of honor.

IV. Lead him to see that if he copies, he is his own worst enemy.

V. Train him to desire to do everything independently and to resent aid.

VI. Lead him to see that the independent thinkers are the ones on whom others rely, and those who really are useful and who accomplish something in the world.

*Why Does the High School Teacher Have Trouble in Teaching Arithmetic?*

The high school teacher of arithmetic is troubled because the pupil does not take the initiative but waits to be led.

If arithmetic were made more of an investigating study and the pupil were forced to take the initiative in the lower grades, the high school teacher's task would be less difficult.

*The Business Man's Complaint.*

The business man complains that the high school graduate's knowledge of arithmetic is lacking because the latter is slow and inaccurate.

The business man needs an expert in accuracy and swiftness, so that his work may be done satisfactorily, no mistakes may be made and his customers may not be kept waiting while a novice waits to figure out with paper and pencil, ordinary computations that should be made on the instant by the mind.



While it may not be the teacher's province to train clerks, yet drill in speed may easily be given the pupil.

*Should the Teacher Use a Key?*

The teacher has a perfect right to obtain all the aids she can command. It is better, however, that the child should not know that they are in the teacher's possession.

Only an able teacher can use a key to advantage, because when she has digested the explanation, which often is as intricate as the problem itself, she must have it so well in mind that she can explain every detail, otherwise she may betray that she has sought aid.

A key is of aid in two cases :

I. It may be that the teacher is introducing a new book and is capable, but the problem is difficult and would take hours to solve, which time she cannot spare.

II. It may be that the teacher is unable to solve it and her reputation may be saved.



## CHAPTER XIII

## Questions on Number and Arithmetic

- 
1. When begin the study of number?
  2. Why?
  3. When cease the study of arithmetic?
  4. What is the difference between number and arithmetic?
  5. What is meant by the terms concrete and abstract?
  6. When does the child come to the abstract idea of number?
  7. Should objects be used?
  8. If so, what objects?
  9. What teach the child
    - First year?
    - Second year?
    - Third year?
  10. When begin the use of the text?
  11. How teach the subject before this?
  12. What processes are there in arithmetic?
  13. What is meant by synthesis?
  14. By analysis?
  15. By incidental teaching in arithmetic?
  16. By accidental teaching?
  17. To what grades do incidental and accidental teaching especially refer?
  18. With what subjects may arithmetic be correlated, if taught incidentally?
  19. What is the educational value of arithmetic?
  20. In actual life why do we need arithmetic?
  21. A thorough understanding of what studies is dependent upon arithmetic?
  22. May pupils gain "culture value" from arithmetic?
  23. Does the study of arithmetic teach the child to reason only along mathematical lines?
  24. What is the motive outside of arithmetic?

25. Why might arithmetic be called a form study?
26. Which should we instill into pupils, what arithmetic is, or what it will do?
27. Should the object of arithmetic in the child's mind be a knowledge of the process involved or a knowledge of the facts?
28. What would you call the child's need in arithmetic?
29. When should such a subject as addition or interest be considered finished, when the pupil knows the facts, or has mastered the processes?
30. Might not arithmetic be made more of a thought study by giving data to look up and figure upon?
31. Of what value to the child is it to first solve problems by indicating a number of operations by the proper signs and then performing the operations indicated?
32. Should the child be stimulated to further investigation?
33. What are some good texts in arithmetic?
34. What is the topical system in arithmetic?
35. What is the extreme spiral?
36. What is the modified spiral?
37. What is the natural order in which the mind gains a knowledge of forms and processes?
38. What is meant by the storage theory?
39. By the present use theory?
40. What kind of problems should the book contain?
41. Should the text contain catch problems?
42. Who should formulate the rules?
43. Why are there no rules in some texts?
44. Who should formulate the definitions?
45. Why are there no definitions in some arithmetics?
46. Should there be a set form for the analysis of a problem?
47. How often should reviews be given?
48. Of what value is it in review to require pupils to write rapidly the solution of several problems without stopping to perform the operations?

49. Should there be a final review of arithmetic in the High School?
50. Why?
51. Should the metric system be taught?
52. Why?
53. Should arithmetic include algebra and geometry?
54. If so, why?
55. How much of each?
56. Should the teacher strive for speed or accuracy?
57. What value have estimates or approximates?
58. What short methods are deemed practical?
59. Should the text contain answers?
60. What are the difficult subjects in the study of arithmetic?
61. What mathematical subjects succeed arithmetic?
62. What is the best period for the arithmetic recitation?
63. Should arithmetic be made the basis of promotion?
64. Was the teacher justified, who promoted pupils working correctly over fifty problems?
65. Why has such stress been laid upon arithmetic in the past?
66. It too much time given to it?
67. Should as much time be given to arithmetic as to reading?
68. Should any subjects be eliminated from arithmetic?
69. If so, what ones?
70. Why do some children dislike arithmetic?
71. Can a child be "born short" in arithmetic?
72. How be sure the child has worked independently?
73. Should pupils be allowed to work problems together?
74. Why?
75. How keep pupils from "handing down" note books?
76. Should note books be destroyed?
77. Why is it difficult to teach the child fractions?
78. Should the child be taught to invert the fraction or simply to imagine the inversion?

79. Is the student who is strong in arithmetic, also strong in other lines of work?
80. Does the specialist in mathematics possess the qualities of honesty, uprightness and truthfulness?
81. Should drills in arithmetic be given during opening exercises?
82. Why does the high school teacher have trouble in teaching arithmetic?
83. What complaints do business men make when discussing the high school graduate's knowledge of arithmetic?
84. How may arithmetical records be kept?
85. Should the teacher have a key?
86. From what nation did we get some of our subjects in arithmetic?
87. What books treat of the history of arithmetic?
88. What are good devices in arithmetic?

## CHAPTER XIV

# Outline for the Study of Texts in Arithmetic

---

V. *Preface.*

- a. No. of pages?
- b. Comparative length?
- c. Main heads?
- d. Are they definitely brought out?
- e. Comprehensive?
- f. Does it contain only essentials?
- g. Does it contain unnecessary details?
- h. Does it state reasons why arithmetic is taught?
- i. Does it state the ends to be accomplished by the book?
- j. Does it contain names of critics?

VI. *Introduction.*

- a. Length, comparative?
- b. Acknowledgment of aid?
- c. Names of critics?

VII. *Contents.*

- a. Length, comparative?
- b. Divided into parts?
- c. Logical?
- d. Are subjects grouped?
- e. Found in different parts of book?
- f. Indexed?

VIII. *Suggestions to teachers.*

- a. Comparative number?
- b. Sufficient number?
- c. Helpful?
- d. Where found?
  1. At bottom of page?
  2. Interspersed through text?

IX. *Material.*

1. Arrangement?
  - a. Logical?
  - b. Illogical?
  - c. Topical system?
    1. Is there a sequence of topics?
    2. Does it embody mathematical principles in interesting and instructive groups?
    3. Is there an exhaustive treatment of each subject whenever it is under discussion?
  - d. Extreme spiral?
  - e. Modified spiral?
2. Inductive?
3. Deductive?
4. Attractive?
5. Repellent?
6. Baldly mechanical?
7. Based on a rational psychological method?
8. Practical?
9. Addressed to understanding?
10. Addressed to memory?
11. Does it represent real or artificial conditions?
12. Drawn from industrial sources and every day affairs?
13. Does it relate to matters with which pupils' experience in and out of school have familiarized him?
14. Does it open to the pupil a wide range and variety of uses for elementary mathematics in commercial affairs?
15. Does it follow the storage theory?
16. What subjects found in the old arithmetics are omitted?
17. Is arithmetic correlated with other subjects?
18. Does it secure clearness, precision and certainty of thought?
19. Is it difficult?
20. Too difficult?
21. Not sufficiently difficult?

22. Is it suited to the particular stage of the pupil's development?

X. *Problems.*

- a. Industrial?
- b. Business (in commerce)?
- c. On locomotive engine?
- d. Agricultural?
- e. In farm account keeping?
- f. Geographical?
- g. In manual training?
- h. In nature study?
- i. In physical measurements?
- j. Do they call for actual measurements by pupils?
- k. Does text require pupil to make standards of measure?
- l. Are there suggestions for original problems?
- m. Examination?
  1. How many?
  2. From what cities?
- n. Are the data correct and consistent?
- o. Do you touch the actual life of this country at this time?
- p. Tiresome inheritance of the past?
- q. Are they suited to the pupil's thought power?
- r. Are they conducive to mental discipline?
- s. Oral
  - a. Comparative number?
  - b. How often found?
  - c. Where found?
- t. Written.
  - a. Comparative number?
  - b. How often found?
  - c. Where found?
- u. Miscellaneous
  - a. Number of pages?

- b. Where found?
    - c. Adequate?
  - v. Sight
    - a. Comparative number?
    - b. How often found?
  - w. Catch
    - a. Comparative number.
    - b. Absence of?
- XI. *Division into lessons.*
  - a. Well divided?
  - b. Poorly divided?
- XII. *Grading of lessons.*
  - a. Well graded?
  - b. Poorly graded?
- XIII. *Definitions.*
  - a. Comparative number?
  - b. How reached
    - Inductively?
    - Deductively?
  - c. Lengthy?
  - d. Concisely worded?
  - e. Printed in italics?
  - f. Principal words in italics?
  - g. Principal words in blacker type?
  - h. Synopsis of?
    - I. Number of Pages?
- XIV. *Rules.*
  - a. Comparative number?
  - b. Absence of?
  - c. How developed
    - Inductively?
    - Deductively?
  - d. Concisely worded?
  - e. After development are they grouped?
  - f. Where found
    - I. In blacker type?



## 2. In italicized print?

XV. *Explanations.*

- a. Comparative number?
- b. Brief?
- c. Lengthy?
- d. Clear?
- e. Confusing.
- f. Adequate?

XVI. *Cautions.*

- a. Comparative number?
- b. Where found?

XVII. *Tables.*

- a. What ones?
- b. How developed
  - Inductively?
  - Deductively?
- c. Where found
  - 1. Scattered through book?
  - 2. Massed at back of book?

XVIII. *Questions.*

- a. Comparative number?
- b. Testing?
- c. Provocative of thought?
- d. Logical sequence?
- e. Where found?

XIX. *Reviews.*

- a. Frequent?
- b. Few?
- c. How often found?
- d. Contain important features?
- e. Contain non-important details?
- f. Material presented as in previous lessons?
- g. New view of an old subject?
- h. Problems in Addition, Subtraction, Multiplication and Division found on one page?

XX. *Summaries.*

- a. Frequent?
- b. Few?
- c. Contain essentials?
- d. Non-essentials?

XXI. *Drills.*

- a. Comparative number?
- b. Upon essential subjects?
- c. Non-essential subjects?

XXII. *Algebra.*

- a. How many pages devoted to this subject?
- b. What topics are considered?
- c. Are the rudiments well covered?
- d. Is it correlated with arithmetic?

XXIII. *Geometry.*

- a. Concrete?
- b. Abstract?
- c. Are the rudiments well covered?
- d. Do problems call for actual measurements with instruments by the children?
- e. Introduced only as it applies to mensuration?
- f. Plenty of constructive work?

XXIV. *Suggestions to pupils.*

- a. Comparative number?
- b. Helpful?
- c. Practical?
- d. Where found?

XXV. *Illustrations.*

- a. What is the list of illustrations?
- b. What are the subjects?
- c. Number?
- d. Of modern life?
- e. Do they aid in the understanding of number relations?
- f. Are they helpful in suggesting material for the pupil to use?

- g. Do they render more interesting and real, groups of problems?

XXVI. *Short methods.*

- a. Number of pages?
- b. Number of methods?
- c. What are presented?
- d. Are they practical?

XXVII. *Answers.*

- a. Comparative number?
- b. Number of pages?
- c. Where found?
- d. Is the key published?

XXVIII. *General review of arithmetic.*

- a. Number of pages?
- b. What subjects are presented?
- c. Essential subjects?
- d. Non-essential subjects?

XXIX. *Approximations.*

- a. Comparative number?
- b. In connection with what subjects found?

XXX. *Metric system.*

- a. How many pages devoted to it?
- b. Is treatment sufficiently full?

XXXI. *Accuracy.*

- a. In material of text?
- b. In figures?
- c. Of statements in problems?
- d. Of answers?

XXXII. *Inaccuracies.*

- a. Comparative number?
- b. Does author invite correction of?

XXXIII. *Supplementary work.*

- a. Of what nature?
- b. Adequate?
- c. Where found?

XXXIV. *Size of print.*

- a. Large?
- b. Small?
- c. Difference in type?

XXXV. *Appendix.*

- a. Contents?
- b. Number of pages?
- c. Unusual features?

XXXVI. *Index.*

- a. Number of Pages?
- b. Alphabetically arranged?

XXXVII. For what age?

XXXVIII. For what grade?

XXXIX. Favorable criticisms?

XL. Unfavorable criticisms?

XLI. Unusual features of book?

XLII. Problems before the teacher?

XLIII. Psychological aspect of Arithmetic?

## CHAPTER XV

# Review Questions on the Texts of Arithmetics Examined

---

1. Which has the longest preface?
2. Which the shortest?
3. Which states four aims which it hopes to accomplish?
4. Which would serve as a good chapter on arithmetic for the methods recitation?
5. Which is founded on a rational psychology?
6. Which strives to present a pedagogical development of elementary mathematics?
7. Which strives to preserve continuity throughout the book?
8. Which states three steps that are to be observed in teaching number?
9. Which favor object teaching?
10. Which authors ask to have errors pointed out to them?
11. Which acknowledge aid?
12. Which contains the best preface?
13. Which books contain an introduction or review of previous work?
14. Which has an introduction designed to form a transition from vacation experiences to the severe study of formal processes?
15. Which has the best table of contents?
16. Which recognize a general demand for abridgment of topics?
17. Which contains notable omissions?
18. Which try to exclude irrelevant matter?
19. Which do not contain longitude and time?
20. Which conform to the storage theory?
21. Which to the present use?
22. Which states at the beginning of each chapter the gen-

- eral plan and then proceeds to go into details?
23. Which repeats important chapters?
  24. In which are suggestions to teachers found?
  25. Which has the best?
  26. Which has the most logical arrangement?
  27. Which typify the topical system?
  28. Which the extreme spiral?
  29. Which the modified spiral?
  30. Which are inductive?
  31. Which deductive?
  32. Which is addressed to the understanding rather than the memory?
  33. Which correlates arithmetic with other subjects?
  34. Which strive to deal especially with problems connected with the actual life of the child today?
  35. Which are too difficult?
  36. Which not sufficiently difficult?
  37. Which contains problems based on geography?
  38. On history?
  39. On manual training?
  40. On nature study?
  41. On physical measurement?
  42. On the time book of a small manufactory?
  43. On some of our great railways?
  44. On distances from Chicago to fourteen railroad centers of the United States?
  45. On the army and navy?
  46. On some of the large buildings of the world?
  47. On our iron mines?
  48. On the thermometer?
  49. On the barometer?
  50. Involving the expenses of the home?
  51. On the skiameter?
  52. On school statistics for thirty of the largest cities of the United States?
  53. On Brooklyn's assessments and taxes for ten years?

54. On United States government lands?
55. What book emphasizes commercial relations?
56. Which treats of problems in which our country excels others?
57. In which others excel us?
58. Which call for actual measurements by pupils?
59. Which calls for estimation of magnitudes by pupils?
60. Which contain data for original problems?
61. In which are puzzling problems found?
62. Which do not contain catch problems?
63. Which mention that care has been exercised to make the data of problems correct?
64. In which are the lessons well divided?
65. Poorly divided?
66. In which is there no division into lessons made?
67. In which are the lessons well graded?
68. Poorly graded?
69. Which contain definitions?
70. Which contain practically no definitions?
71. Which have definitions massed at end of text?
72. Which contain a prophecy made by Col. Francis Parker with regard to arithmetic?
73. Which have rules?
74. Which have rules at end of text?
75. Which contain practically no rules?
76. Which has the clearest explanations?
77. Which contain cautions?
78. In which are tables grouped in the back of the book?
79. Which has many questions?
80. Few questions?
81. Which has the best reviews?
82. Which has a general review of arithmetic?
83. Which contains examination questions gathered from different cities and sources?
84. Which has the best test questions?
85. Which emphasize thoroughness?
86. Which gives exercises for drill in speed?

87. Which emphasizes rapidity?
88. Which strive to overcome complaints of business men and high school teachers by plenty of drill?
89. Which strive to train rapid computers?
90. Which contain algebra?
91. Which use the equation in the solution of arithmetical problems?
92. In which is algebra treated as a chapter by itself?
93. In which is it connected with arithmetic almost throughout the text?
94. In which is the best work on algebra found?
95. Which contain geometry?
96. Which contains the best work on geometry?
97. Which gives work in geometrical drawing?
98. Which has the best suggestions to pupils?
99. Which believes that pictures aid in the understanding of certain number relations?
100. Which contains illustrations not usually found in an arithmetic?
101. Which contains colored illustrations?
102. Which treats of the fundamental operations whenever a new topic is considered?
103. Which contains supplementary work?
104. Which contains a supplement?
105. Which has the best appendix?
106. Which contain short methods?
107. Which contain work on approximations?
108. Which treat of the metric system?
109. In which is the greatest common divisor called the greatest common measure?
110. Which contains a table of exports?
111. Which has the best index?
112. Which have answers?
113. Which have a key?



- 114. In which is a protractor found?
- 115. Which text do you like best?
- 116. Which least?

## CHAPTER XVI

## Geography

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The true study of geography is so far-reaching in its scope that it cannot fail to render the child broader minded and more intelligent, because:

I. It makes the child the central thought and teaches him his personal relations to the earth and its surface.

II. It teaches him how his habits differ from those of his European brothers and from what these differences result.

III. It makes him appreciate more fully, and feel more at home in, his own environment.

If he studies thoroughly his own home geography, then travels and observes that of another region, he can interpret far more intelligently his home surroundings.

IV. It enables him to understand foreign countries better because he comprehends his immediate environment.

V. It teaches him to read intelligently periodicals, whether newspapers or magazines, books of travel or those in which there are geographical references.

VI. To listen intelligently to lectures.

VII. To understand better current events that are transpiring in other parts of the world.

VIII. To interpret art more intelligently.

IX. To interpret music more intelligently.

X. To follow friends in their journeys.

XI. To cultivate his power of imaging clearly and also his constructive imagination.

The mountains or the sea can only become real to the child as he uses his apperceptive faculties.

Colonel Parker said: "A clear image of one part of the world intensifies an interest in all that happens there."

XII. To cultivate his perceptive faculties because of the field work he should do.

XIII. To develop in reasoning power.

He used to be taught to remember that a city occupied a certain place on the map. Now he is shown the reason why a city has developed at such a point or why an industry has localized at a certain place. For example, cities have been established at Raleigh, Columbia and Macon, because :

1. They are at the head of navigation.
2. The fall line furnishes the water power.
3. They form a trading post between two industries.

XIV. To reason inductively.

XV. As he reasons from cause to effect and from effect to cause, he learns to exercise the "theorizing activity" which Dr. Gordy considers so valuable in the study of history.

XVI. It must develop in the child a certain sympathy with a people who are laboring under geographical disadvantages.

e. g. With the Kentucky mountaineers.

This country is so cut up and dissected by streams that one man has only a small tract of land to cultivate, and he is separated from his neighbors and from practically all contact with civilization.

Mill says, that it is the best example to be found of the geographic control of a people.

In direct contrast to this is the man who settles in the Blue Grass region of this same state and makes his fortune.

The following story is told of two brothers who moved into this state. One settled in the Blue Grass region and his sons and daughters are among the highly educated people of this commonwealth. The other settled in the plateau and his children are poor and uneducated.

XVII. It gives the child the key to the degrading and elevating influences of the structural and climatic environment.

Until we understand the bearing of climate and its effect on the people of the torrid zone, we have no right to judge their morality, because, under the existing conditions, it is:

impossible for them to live up to our standards.

XVIII. It teaches the child his dependence upon his fellow beings for food, clothing and the utensils demanded by his life. A certain Boston school requires one or more pupils to board nearly every ship arriving at that city from a foreign port, in order to learn the character of its cargo.

XIX. It prepares the child to travel intelligently.

It is a trite saying that a year of travel is worth a year of school work. In some of the most progressive European schools the teacher travels with a limited number of pupils and teaches them en route.

A teacher in the Duluth schools took an imaginary ocean trip with her pupils, and some highly educated parents, whose children came under this teacher's instruction, unhesitatingly testified that their sons and daughters were prepared to visit foreign lands more intelligently than they themselves, because of their study under her supervision.

XX. It shows the child how the human mind has triumphed over the obstacles of nature and even over the limitations of climate and soil.

For example, the irrigation processes carried on in the West.

The Pennsylvania railroad tunnelling through the mountains of that state.

XXI. It teaches the child the value of knowing well a few good types as a foundation for future study.

XXII. It helps the child to interpret with more breadth of meaning the study of history.

### **Excursions**

I. Excursions teach the child:

1. To observe.

It is said that no other power enters more vitally into the child's ultimate success than that of being able to observe accurately.

2. To study objects rather than books.

3. To see and reason logically.
4. To describe graphically.
5. To be self-reliant in full and clear expression.

II. Excursions help the teacher :

1. By broadening her knowledge of practical affairs.
2. By bringing her into closer touch with the child and thus giving her a better opportunity to note his individualities.

III. Teacher's preparation :

The teacher should visit the place first in order to understand it thoroughly herself, to decide wisely what will interest and instruct the child and prepare questions to ask him.

An excursion is difficult to manage and unless clear instructions are given the class before it starts, haphazard results may be expected from the recitation.

The child should be told definitely just what he is expected to observe. Groups of two or three may be given a special topic to report upon.

During one summer session at Chicago Institute, each member of the excursion was given a mimeographed copy of questions to be answered when the class reassembled.

The teacher may invite her friends or appoint a few of the more reliable pupils to assist her in any necessary discipline.

IV. What pupils need for the excursion :

It is best to take as little extra baggage as possible.

Note book and pencil.

Knapsack and hammer.

A lunch if the excursion is a long one and food is not easily obtained for a large number.

A kodak, if the pupil chooses.

Clothing suitable for a long, hard tramp.

Shoes that are easy to the feet, and short skirts for the women.

Great care should be taken to prevent accident, and if a place is visited which is at all dangerous it is best to take

only a few of the younger pupils at a time.

#### V. Where take excursions:

Chicago Institute took one excursion to the Sand Dunes in Indiana, another to Winnetka where the entire course of a rivulet was traced to the point where it emptied into Lake Michigan.

Excursions may be taken to:

Dubuque; Des Moines to visit the legislature; a court house; the water works; the electric light plant; public buildings; the printing office; the planing mill; the gate factory; the Cedar River; the nursery, summer and winter; the mill; the blacksmith shop; the brick kiln; a frame house, twice while in process of construction; the wharves, the shop; the freight houses; the ice houses, and some place where the depth and quality of soils may be studied.

#### VI. Ensuing Recitation.

When the class again assembles, the questions that have been asked may be answered, maps may be drawn and the sand table used.

Specimens gathered and kodak pictures taken while on the trip may add interest to the recitation.

These excursions may be made the basis for the drawing lessons and also for the written work.

Parents do not always see the value of such excursions, but think their children will learn more from books. They forget that the real knowledge of the child is measured not by what he learns in text books and sees in the school room, but by actual knowledge of objects and happenings within the realm of his own world about him.

A meeting of parents may be held where the value of excursions may be discussed. Reasons for such trips may be presented and illustrations shown setting forth their educational significance. Parents may be invited to go on these excursions and thus form the habit of visiting places with their children.

### **The Equipments that are Thought Necessary to the Teaching of Geography as Compared with Those of Former Years.**

It was but a short time ago when one text, a few maps, some charts and a globe, were deemed quite sufficient to teach geography adequately. The up-to-date teacher should specialize in this subject at a school in this country noted for research in this particular branch, and then in Germany if possible.

Since geography is not considered a study of books today any more than botany or zoology, the teacher who has had the advantage of travel in her own country and foreign lands will be able to make objects seen, and places visited, far more vivid and real to the pupils' imagination, than one who has studied, no matter how widely, only from texts.

In these days of rapid transit, it is not at all unusual to find that pupils have traveled much more than the teacher, and unless she has had some experience in that line she will be placed at a decided disadvantage.

It is to her advantage then to travel not only on the steam and surface cars, but to have actual experience on elevated and subway lines, to ride on the sight-seeing cars, the touring automobiles, the ocean liners, and the motor boats.

If she travels intelligently and with the thought of instruction in mind, she may gather information that will be of interest when she visits the world's fair, the city park, the art institute, the Field's museum, the aquarium, the life-saving station, the light-house, the circus, and other points of equal interest.

From the manufactory or the mine she may obtain specimens which will interest her pupils intensely.

There should be:

1. A department in the library devoted to the latest and best authorities, in addition to texts always to be found on the teacher's desk.

2. A laboratory in which the pupils may work individually.

3. Pictures large and small of all kinds to illustrate the work, procured by the teacher herself who never traveled kodakless, and postals gathered in her wanderings as well as illustrations obtained from dealers and railroads.

4. Illustrations not only of the typical mountain studied intensively by the class, but others for the sake of contrast.

The same is true of a river, a city, a section of coastline and a valley.

5. A stereoscope with an endless number of pictures.

6. A sand table of such size that many may work simultaneously, and the individual sand pan.

7. Physical and political maps, the finest obtainable, relief maps which are the work of experts, and outline maps ready to be filled in by the pupils.

8. Globes of the most approved kind.

9. A planetarium showing the earth's revolutions around the sun.

10. Minerals carefully collected which remain permanently in the teacher's cabinet.

11. The common rocks of the community.

12. Weather maps.

13. Objects of all kinds having an educative value.

One enthusiastic teacher borrowed a large and costly collection of jewels owned by an acquaintance.

Fac similes of some of the world's famous stones may be borrowed from some jeweler, and prove very instructive.

12. Commercial products in their various stages of manufacture.

13. All kinds of grains in their successive stages of growth.

14. Cross sections of woods showing the different grains.

15. Costumes and utensils used by foreign people.

16. A natural science cabinet full of interesting information that will suggest charts that may be made by the pupils



themselves, and may prove even more interesting than manufactured ones.

17. A set for each pupil, of material published by the best steamship lines to be used when tracing an ocean voyage.

18. Guide books to a few of the most important and interesting cities.

19. Several geographical games.

### **Commercial Geography**

The study of commercial geography is essential to the pupil because industrial rivalry and commercial competition are potent factors among civilized nations.

Commercial life deals with agriculture, manufacturing, mining and commerce. It is not essential that the pupil should know the dry facts of commerce, but it is necessary that he have knowledge of the comparative commercial importance of leading countries, their interrelation, and the reasons for this, so far as geography bears upon the subject.

He should also understand the subject of domestic and foreign transportation as it is carried on both by land and water.

To aid people commercially and to make them more intelligent, government, weather, harbor and typographic maps are sent out by the government. The progressive farmer has the condition of the weather telephoned to him that he may govern himself accordingly.

The eastern railroad lines depend upon these reports to such an extent that they do not start their heavy freights for the west if a severe storm is prophesied.

### **Physical Geography**

Physical geography should be studied because vital, political and commercial geography grow out of and depend upon it.

Boundary lines are of two kinds, natural and artificial, the one permanent, the other temporary, and they have affected the nation's life in separating or failing to separate, peoples.

Physical geography determines largely the animal and vegetable life native to a region.

In studying noted ancient cities it is observed that their location was in fertile regions and that some kind of food grew abundantly in that place.

### **Political Geography**

The child should study political geography to learn concerning:

1. Boundaries which are artificial and have been established by man's agency.
2. The comparative size of the divisions of a country.
3. The government of a people.
4. The density, the increase and the centers of the population of a country.
5. The nationality which predominates in the entire community or in certain portions of it.

## CHAPTER XVII

## Questions on Geography

1. What does the study of geography include?
2. In what grade should it first be taught?
3. What may be made the basis of geography?
4. How many general lessons should precede the study of the text?
5. Where may helpful suggestions be found for these preparatory steps?
6. How long should oral lessons be given?
7. What is the difference between nature study and geography?
8. Should a series of lessons be given in the text before the child is ready for the book?
9. When begin the study of the geographical text?
10. Shall the child read the beginning lessons in the recitation period?
11. When should the study of geography cease?
12. What subjects may be correlated with geography?
13. How would you correlate in studying a subject like cotton?
14. What studies give the child a better understanding of geography?
15. What subjects depend upon geography for a better understanding?
16. What is the educational value of the subject of geography?
17. Can "culture value" be gained from geography?
18. Should it be a memory study?
19. Should it be a study of relations, causes and effects?
20. Should it be made an inductive or deductive study?
21. Should geographical forms be developed before the text is studied?
22. How may further investigation be stimulated?

23. Should lessons be assigned in the order of the text?
24. Who should formulate the definitions in geography?
25. What is meant by the spiral system in geography?
26. What part does the dictionary play in the study of geography?
27. Of what value is the encyclopedia in this branch of study?
28. What place do periodicals occupy in this subject?
29. Why does the teacher of geography consider it necessary to keep posted on current events?
30. Where may historical and literary geographical references for outside reading be found?
31. Of what value is the study of commercial geography?
32. What is the prominence of this subject today?
33. What relation does astronomy bear to geography?
34. What use could be made of the telescope in connection with this subject?
35. Of what value are objects in this study?
36. What are the difficult subjects in geography?
37. What are good texts in geography?
38. What are the best texts for the study of Iowa?
39. What is meant by types?
40. What geographies make a feature of types?
41. What peak would you select for a typical study of mountains?
42. What valley?
43. What river?
44. What coast?
45. What prairie?
46. Of what value is chalk modeling?
47. In what grades may it be used?
48. Does it lead to misconceptions in regard to heights and depths?
49. What is the best text on chalk modeling?
50. Of what value is the sand table?
51. How would you use it?

52. How would you use sand pans?
53. What are the comparative advantages of sand table and sand pans?
54. What is the cost of the sand pan?
55. In what grade should the child begin to draw maps?
56. What ones should he draw in the beginning work?
57. In what different ways may maps be made by pupils?
58. In what grades may dissected maps be used to advantage?
59. In what grades may products be located on stencil maps?
60. What is a weather record?
61. Where may they be found?
62. How may they be kept?
63. Of what value to the child are excursions?
64. Of what value are they to the teacher?
65. Where may they be taken?
66. What should be the teacher's preparation for the event?
67. How may definite results be obtained?
68. What do pupils need for the excursion?
69. For what may these trips be made the basis?
70. Of what should the recitation following the trip consist?
71. Why are such trips criticised?
72. How may these objections be overcome?
73. What are good references on the subject of excursions?
74. Should any subject be eliminated from the study of geography?
75. If so, what?
76. Should the child memorize the capitals of states?
77. What intellectual equipment was considered necessary years ago for a teacher in geography?
78. What is deemed necessary for the specialist today?
79. What equipment in the line of apparatus was formerly deemed essential?
80. What are the demands for apparatus today?
81. How may this equipment be obtained?

82. What is meant by the sense of direction?
83. What is the cause of a lack of this sense?
84. What may be done to overcome a deficiency of this kind?
85. How may a volcano be represented?
86. Where may a county map be obtained?
87. Why is not the study of geography a "fixed" study?
88. What bearing has the intellectual atmosphere of the home upon the child's geographical knowledge?
89. How was this atmosphere created?
90. What problems lie before the teacher of geography?
91. Can the concentrated study obtained from the child in mathematics be extracted from him in geography?
92. Can the same degree of mental discipline be obtained from the study of geography as from mathematics?
93. What is the most valuable thing to be gained from the study of geography?
94. What periodical is most helpful to the teacher of this branch?
95. When is the best period for the geography recitation?
96. What devices are there in the study of geography?

## CHAPTER XVIII

# Outline for the Study of Geographical Texts

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V. *Preface.*

- a. Number of pages?
- b. Comparative length?
- c. Main heads?
- d. Are they definitely brought out in blacker type?
- e. Comprehensive?
- f. Does it state the author's plan in the arrangement of material?
- g. Does it give his reasons for such arrangement?
- h. Does it contain acknowledgment of aid?
- i. Does it contain names of critics?

VI. *Introduction.*

1. Number of pages?
2. Comparative length?
3. Acknowledgment of aid?
4. Names of critics?

VII. *Contents.*

1. Length?
2. Number of lessons?
3. Divided into parts?
4. What are the principal heads?
5. Does it contain only main heads?
6. Does it contain details?
7. Is there logical sequence of thought?

VIII. *Suggestions to teachers.*

1. Where found?
2. Is the number sufficient?
3. Are they helpful?

IX. *Material.*

1. Inductive?

2. Deductive?
3. Composed of statements to be memorized?
4. Is the child led to reason, compare and generalize for himself?
5. Arrangement
  - a. Logical?
  - b. Illogical?
  - c. Topical?
  - d. Spiral?
6. Attractive?
7. Conversational narrative?
8. Up to date. Does it contain knowledge of our recent possessions?
9. Is it true to the instincts of childhood?
10. Does it stimulate to further investigation?
11. Difficult?
12. Too difficult?
13. Not sufficiently difficult?

X. *Division into lessons.*

1. Well divided?
2. Poorly divided?
3. Practically no division made?

XI. *Grading of lessons.*

1. Well graded?
2. Poorly graded?

XII. *Reviews.*

1. Comparative number?
2. How often found?
3. Do they contain important features?
4. Do they contain non-important details?
5. Material presented as in previous lessons?
6. New view of an old subject?
7. Good?
8. Poor?

XIII. *Summaries.*

1. Comparative number?



2. Contain essentials?
3. Contain non-essentials?

XIV. *Questions.*

1. Comparative number?
3. Testing?
3. Provocative of thought?
4. Logical sequence?
5. Where found?
6. On map?
7. On text?
8. Which predominate?

XV. *Explanations.*

1. Comparative number?
2. Lengthy?
3. Short?
4. Clear?
5. Confusing?
6. Adequate?

XVI. *Definitions.*

1. Comparative number?
2. Lengthy?
3. Concisely worded?
4. Printed in italics?
5. Printed in blacker type?
6. How reached
  - Inductively?
  - Deductively?
7. In which part of the book do they predominate?

XVII. *Suggestions to pupils.*

1. Comparative number?
2. Helpful?
3. Where found?

XVIII. *Foot-notes?*

XIX. *Illustrations.*

1. Quality?
2. Half-tone?

3. Educative?
4. Printed clearly?
5. Attractive?
6. Colored?
7. Of modern life?
8. Number as compared with maps, charts and diagrams?
9. Especially prepared for the text?
10. From what source obtained?

XX. *Charts.*

1. Sufficient number?
2. Good?
3. Poor?

XXI. *Maps.*

1. How many kinds are there?
2. Large?
3. Small?
4. Contain only essentials?
5. Details?
6. Clearly printed?
7. Do they show U. S. dependencies?
8. List of maps?
9. Suggestions for map drawing?
10. Artistic?
11. Are they well paged?

XXII. *Diagrams.*

1. Number?
2. Of what nature?

XXIII. *Pronunciation of difficult words.*

1. Number of pages?
2. Important words?
3. Adequate number?

XXIV. *Authorities for pronunciation quoted?*

XXV. *Size of print.*

1. Large?
2. Small?

3. Is there difference in type?
- XXVI. *Collateral reading.*
  1. Number of pages?
  2. Divided into subjects?
  3. Refer to lessons or sections?
  4. Where found?
- XXVII. *Appendix.*
  1. Number of pages?
  2. Contents?
  3. Unusual features?
- XXVIII. *Reference tables.*
  1. Space given?
  2. Adequate?
- XXIX. *Tables of statistics.*
  1. Number?
  2. Where found?
- XXX. *Special study of Iowa.*
  1. Text?
  2. Maps?
- XXXI. *Index.*
  1. Number of pages?
  2. Alphabetically arranged?
- XXXII. *Unusual features of book?*
- XXXIII. *For what age?*
- XXXIV. *For what grade?*
- XXXV. *Favorable criticisms?*
- XXXVI. *Unfavorable criticisms?*
- XXXVII. *Problems before the teacher?*
- XXXVIII. *Psychological aspect of text?*

## CHAPTER XIX.

## Review Questions on Geographical Texts Examined

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1. Which book is the most convenient shape?
2. Which is the oldest?
3. Which the most recent?
4. Which has the longest preface?
5. Which the shortest?
6. Which contains the best preface?
7. Which texts have been criticised by geographical experts?
8. Which make acknowledgments?
9. Which author welcomes suggestions and criticisms?
10. Which contains the best table of contents?
11. Which has the principal heads of the table of contents brought out in blacker type?
12. Which has the principal heads of minor topics in blacker type?
13. Which contains the best aids for teachers?
14. Which are inductive in their plan?
15. Which deductive?
16. Which are constructed upon the topical plan?
17. Which upon the spiral?
18. Which is based upon modern pedagogical theories?
19. In which is man the central thought?
20. Which emphasizes the casual notion in teaching geography?
21. Which has prepared material along the lines recommended by the committee of fifteen?
22. Which emphasize types?
23. Which emphasize commercial geography?
24. Which presents material in a conversational form?

25. Which strive to incite the pupil to outside study?
26. Which contains the best treatment of our foreign possessions?
27. Which has foreign possessions in the front of the text?
28. Which uses the term "Eurasia?"
29. Which has the material most logically arranged?
30. Which is the most difficult text?
31. Which is too difficult?
32. Which has the lessons well divided?
33. Poorly divided?
34. Which makes no division into lessons?
35. Which has the lessons well graded?
36. Poorly graded?
37. Which has the best reviews?
38. Which has the best review of North America?
39. Which has a review of the United States as compared with other countries?
40. Which has a comparison of the continents?
41. Which have summaries?
42. Which has the best summary?
43. Which contains many questions?
44. Which comparatively few?
45. Which has testing questions?
46. Which have those provocative of thought?
47. In which are there the best questions?
48. In which do questions on the text predominate?
49. On the maps?
50. Which has the best explanations?
51. In which are the definitions set off separately by themselves?
52. In which are they merely a part of the fund of information?
53. Which has the entire definition in blacker type?
54. Which has simply the principal word of the definition in blacker type?

55. Which has the best definitions?
56. Which has the best suggestions to pupils?
57. Which has foot notes?
58. Which has the best illustrations?
59. The least attractive?
60. Which have the half-tone illustrations?
61. Which seem the most up-to-date?
62. Which has the largest number of modern illustrations?
63. In which are they prepared especially for the text?
64. In which are pictures of animals placed upon the map in the section of the country where they habitate?
65. In which is there a grouping of pictures of the same kind, e. g. mountains?
66. Which contains illustrations of lighthouses and the range of the visibility of lights?
67. Which has highly colored illustrations?
68. Which contains an illustration of the compass?
69. In which is a diagram of the cotton-gin?
70. Which has a view of the stars through the telescope?
71. Which has the best charts?
72. Which has the best physical maps?
73. Which the best political?
74. Which the best commercial?
75. Which the best relief?
76. Which has a key to the relief maps?
77. In which are drawings which have passed under an expert in cartography?
78. In which are the maps indicated as political, physical, commercial and relief?
79. Which has the least attractive maps?
80. Which contains the best list of maps?
81. Which has the best directions for map drawing?
82. Which has the largest maps?
83. Which the smallest?
84. Which contain many details?

85. Which few details?
86. Which has maps in the body of the text containing few details and a reprint of the same maps in the back of the book containing more details?
87. Which maps have the names of cities printed according to the population?
88. Which have a state included for comparative area?
89. In which are the maps well paged?
90. Which has a page containing maps of all the dependencies of the United States?
91. Of the most important steam ship lines?
92. Which have a commercial map of the world?
93. Which contains enlarged maps of harbors?
94. In which maps are land heights and water depths shown?
95. Whose imprint on maps corresponds to the sterling mark on silver?
96. Which has the best diagrams?
97. Which have a weather record?
98. Which quote authorities for pronunciation?
99. Which has the best pronouncing vocabulary?
100. Which has the best print?
101. Which has practically uniform type throughout?
102. Which has the best paper?
103. Which has the best collateral reading?
104. Which has collateral reading included in the text?
105. Which has the best appendix?
106. Which have reference tables?
107. Which include a special study of Iowa?
108. Which has the best treatment of the geography of Iowa?
109. Which books have manuals?
110. Which have the cross index?
111. Which has important topics very fully worked out in the index?

- 112. Which has the best index?
- 113. Which would you enjoy teaching most?
- 114. Which least?



## CHAPTER XX.

## Spelling

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### *The Educational Value of Spelling.*

Someone has said that it is no crime to be a poor speller nor is it any particular credit to be a good speller.

It is a part of "the culture that marks the man of letters" and yet is not thought to have educational value accorded to some subjects.

Says Roark: "There is no test of literacy or illiteracy quite so rigidly applied as the test of ability to spell."

McMurry, in his *Method of the Recitation*, states that, "it is not a full study," and again, "spelling fails to receive the respect accorded to other studies."

Dr. Gordy says, "the child recalls the correct spelling of the word by a dead heave of mechanical memory."

### *How Does Spelling Compare in Value With Arithmetic, Geography or History?*

The educational value that is derived from a study like spelling is not at all comparable to that derived from a branch like arithmetic, geography or history.

In the last mentioned subjects, principles, generalizations and underlying truths can be sought such as cannot be found in a subject like spelling.

A generalization formed in a subject like geography may lead to a broader generalization and that in turn may lead to a still broader one, but no such opportunity is offered in spelling.

McMurry says: "Its want of reliable rules deprives it of scientific content and it is regarded by many persons as an evil, though a very necessary one."

Another has said, that if the child forgets the spelling of a word, there is nothing in which the judgment can help to set him right.

In view of all this, education demands that the cultured man be able to spell correctly.

*What Good Results From the Study of the Subject?*

I. Fitch says: "Every new word which we thus add to a child's store, is a new instrument of thought and does something to widen the horizon of his understanding."

II. Correct spelling indicates a certain kind of education.

III. It commands respect from others.

IV. It trains a peculiar kind of memory which is not used in other studies, however.

V. It aids in pronouncing a word correctly. He who mispronounces is often ignorant of the correct spelling of the word.

VI. It aids in distinct articulation.

VII. There is a feeling of conscious power that comes from the mastery of even a minor subject like spelling.

*Does It Develop the Reasoning Power?*

While the reasoning power may not be called forth in a branch like the one under discussion as in some subjects, yet it does develop it to a degree.

The old-fashioned way of spelling the word by pronouncing it before and after spelling, and pronouncing each syllable when spelled and repronouncing the syllables previously spelled, contained a certain kind of logical training.

The modern method contains some logic, though not quite so much. If a new word, as "orthographically," is pronounced to the child, he tries to spell it because he recognizes the root word, graph, knows how to spell the prefix and suffix, guesses at the letters needed to join the syllables and usually forms the correct combination.

He uses a certain kind of reasoning power also in applying the few rules and exceptions which it is wise for him to learn.

*What Classes of People Need Spelling Most?*

Teachers, professional people, all whose writings come

before the public eye, as authors, editors, proof-readers, book-keepers and type-writers, are some of the people who especially need to know how to spell.

*Why is Such Stress Laid Upon Spelling in the Normal School?*

Stress is laid upon spelling in the normal school, because :

I. The education of the graduate should be such, even in a subject like spelling, as will reflect credit upon the standard of the institution.

II. The teacher should be a model for her pupils.

III. She should be able to correct the pupil's work with great exactness.

IV. However lacking other people may be the teacher is supposed to be perfection in every particular and would command more respect from both pupil and patron if she was not deficient in this branch.

*Spelling in the Grades and in the High School.*

The beginning lessons in spelling should be taught in connection with sight-writing, when the pupil enters school.

At the point, when the child is asked to spell the word which he has written in imitation of the teacher's copy, his spelling lessons begin.

Many believe that the child has not completed his first reader unless he can recognize and spell all the words it contains.

Perhaps an average number of words for a term's work in the lower grades would be between two and three hundred.

Spelling should be taught in at least six grades, if there is a separate period devoted to it.

Through the correction of papers and exercises it is practically taught in the high school even though no separate period may be given to it.

Roark says: "The orthography in all written work, on whatever subject, in whatever grade, from the primary

through the university should be as carefully noted and corrected as anything else in the exercises."

*Should There be a Separate Lesson for Spelling or Should Each Written Lesson be a Spelling Lesson?*

Each written lesson should be a spelling lesson in the sense that the words mis-spelled should be marked and handed to the child to be re-written. He should be marked down for words mis-spelled in the written exercise or in examination in other subjects, for they form a part of the correctness of the production.

*Should Oral or Written Spelling Be Taught Exclusively?*

Neither oral nor written spelling should be taught exclusively for the pupil needs both, but the latter should predominate, because:

I. Each pupil may be tested on all the words in the lesson.

II. Written spelling is used all through life, oral comparatively seldom.

III. Roark says: "Written spelling gives a double opportunity to imprint visual images, and it strengthens these impressions through both ear and hand."

IV. Fitch says: "But after all, it is to be borne in mind that spelling is a matter for the eye, not for the ear. If it were not that we had to write, spelling would be an altogether useless accomplishment."

V. That which is addressed to the eye is retained longer than that addressed to the ear, hence the impression received from written spelling is more permanent.

Roark says: "The teacher's drills in orthography should be of a nature to require the pupil to observe constantly word forms, and he is forced to exercise more care than in oral work.

VI. The frequent use of the familiar dictation exercise is practically a recognition of the fact that it is mainly by writing that spelling is taught.

VII. The pupil is given but one opportunity to spell the

word and he is forced to exercise more care than in oral work.

VIII. He is more careful in writing than in spelling orally, because to re-write means either waste of paper or an untidy page.

IX. It gives the teacher opportunity to examine spelling blanks at her leisure.

X. If blanks are exchanged it may teach the lower grade pupil to be neater and more correct in his work.

Oral spelling if used at all should be studied in the lower grades, as it aids in clear enunciation and correct pronunciation.

When the pupil spells the word orally he should pronounce it first, make a slight pause between the syllables and pronounce it again at the completion of the exercise.

#### *Text or List of Words.*

The method adopted by many excellent teachers is to use a list of words suited to the pupil's grade which it is necessary for him to know, selected from the subjects he is studying as reading, geography, language and history placed upon the board to be studied.

It is not best for the teacher to rely entirely upon her own judgment however, but it is expedient to have ready access not only to one, but to several texts from which to select words that should be added to the list she has made, in case it does not contain words it is important for the pupil to know.

#### *Should a List of Isolated Words be Taught?*

It is not advisable to teach the pupil a list of isolated words just because they happen to have a sound in common. It is of much more value to teach him the word in connection with the sentence in which it is contained. Not until this is done can it be certain that the word has really become a part of his vocabulary.

Nor should he be taught to spell words of whose meaning

he is ignorant, for they have no connection with his life and may pass from memory nearly as soon as learned.

Fitch says it is unreasonable to "accumulate the difficulties in a menacing and artificial column and expect them to be dealt with all at once."

It is a good plan to require the pupil to write the word and the definition also. The average pupil may with profit use the dictionary in spelling at about ten years of age, to look up the pronunciation and meanings of words and learn the diacritical markings.

If he sees in printed or written form first, some choice, classical selection and it is afterwards dictated to him, it may teach him to spell correctly and serve to quicken his interest in good literature.

He may commit some fine passage and write it from memory and thus a double purpose may be gained as in the previous case.

#### *Should the Rules of Spelling be Taught?*

It would not be wise for the pupil to learn all the rules of spelling for he would not remember them long enough to make it practical, but some of those used most frequently which he would perhaps retain permanently might with profit be committed and repeated from memory.

#### *Should Spelling be Correlated With Other Studies?*

Spelling may be correlated with such subjects as reading, language, history and geography in this wise, that in connection with these studies the pupil may be taught some of the words which should form part of his permanent vocabulary.

#### *The Number of Words to Pronounce in Different Grades.*

After the work is fairly begun in spelling perhaps five words is enough to assign for one lesson in the first grade. This number may be gradually increased as the child's capability develops until in the upper grades it reaches twenty-five or thirty words.

*Should the Child be Given Mis-spelled Words to Correct?*

Although when spelling blanks are exchanged the pupil may correct his class-mate's work, a list of mis-spelled words to be corrected, should not be assigned him as a spelling lesson. If from the time when he is able to read, only those words are kept before him which are spelled correctly, it is believed that his tendency to spell correctly would thereby be strengthened.

*Should There be a List of Mis-spelled Words?*

If there are certain words which are constantly mis-spelled by pupils they may be placed upon the board where they can be seen frequently and may be included in the regular lesson until they are thoroughly learned. .

*Why are We as a Whole a Generation of Poor Spellers?*

The English language is difficult to spell because of its conglomerate nature, being derived from many different sources, the Latin, the Greek, the French, the Spanish, the Italian and other languages.

While there are rules which may guide somewhat in determining the spelling of a word there are so many exceptions to them that the difficulty is but slightly lessened.

*Why Are People Poor Spellers?*

Roark says that "no one pardons a poor speller," so that it may be well to seek to find the cause why people are poor spellers.

I. Sarah Arnold says people are poor spellers because they have not an adequate sense of form.

II. Roark says that the poor speller is he who cannot form and retain accurate visual images of words.

People are also poor spellers from the following reasons, because:

III. Enough emphasis has not been placed upon the subject.

IV. There has been no special period devoted to spelling.

V. Sufficient time has not been spent upon it.



VI. The pupil does not pronounce the word distinctly.  
*Why Are We as a Whole a Generation of Poor Spellers?*

While there are many notable exceptions, it is generally conceded that as a generation we are not the spellers our parents were.

The curriculum in our parents' day did not contain such modern innovations as nature study, physical and manual training, so that more time could be given to each individual subject than we are able to spend.

Roark believes that the poor speller among the adults of today is partly the result of the ignorance of the old school-master who knew nothing of "visual images" or "auricular images."

It is not considered to be a subject of so much importance as it once was and so much force has not been spent upon it. In both speaking and writing the thought has been emphasized to a marked degree and it has been taught that this was of vastly more importance than the vehicle which contained the thought.

*Why Were Our Parents Good Spellers?*

Our parents were good spellers because in former years it was regarded as one of the most important subjects and great stress was laid upon it.

In days of old, a spelling book might be found in each corner of the house, and child spelled to child, to his parents, or to anyone who would listen, so eager was he to master Webster's spelling book from cover to cover.

It was his chief ambition to first wear the honor of being the champion speller of the school, and finally to win the coveted prize at the "spelling match" which grew from local interest to be one of the most exciting events in the public life of the country.

It is possible that more attention was given to the significance of the root word and to its derivatives than is paid now, and this may have militated toward better spelling.



*Should the Child Write the Mis-Spelled Word Twenty-Five Times?*

While writing the mis-spelled word a few times may serve to fix the correct spelling in the child's mind, he should not be required to write it twenty-five times or any great number of times.

He often writes it fairly well the first two or three times and then his penmanship degenerates into a comparatively meaningless scrawl before the task is finished, and the thought uppermost in his mind, is the moment when he will gain his liberty rather than that of spelling of the word.

If not watched when he first begins operations, he sometimes writes the word incorrectly and copies that incorrec-tion the required number of times.

Such unreasonable demands make the pupil feel that he has suffered an imposition, that spelling is a bore and the teacher a task master.

*What Are the New Movements in Spelling?*

The new movements in spelling seem to be but a revival of old customs. It is generally conceded that spelling has been neglected to such a degree that more study should be spent upon it, and so spelling matches are being inaugurated in many places and prizes given as in days of yore.

Roark says: "The spelling match with its captains, its 'choosing out,' its stubbornly fought contests, stimulates the orthographic activity of the whole school, even of those who are not engaged in the struggle."

*Should Diacritical Markings be Taught?*

To spell a word means to know not simply the letters that compose it, and the order in which they occur, but also the sound values of each letter and its diacritical mark.

This knowledge aids in pronunciation and enunciation, which are important components of the spelling of the word.

As a variation from the regular work the pupil may with profit write the word and indicate its diacritical markings.

He may also be required to commit some of the more important rules for such marks. The place for teaching diacritical marks thoroughly and well, is in the lower grades, but if they have been neglected, spellers containing work on this subject and texts on orthography and orthoëpy suited to pupils of the higher grades may be obtained to supplement the deficiency in this important subject.

*How Should a Written Spelling Lesson be Conducted?*

The written spelling lesson may be conducted in the following manner :

I. In assigning the lesson the previous day be sure that the pupil can pronounce the words and that he understands their meaning by having him use them in sentences.

II. Be certain that each pupil is provided with writing materials before the lesson begins.

III. Make it a rule to pronounce the word very distinctly but once.

To pronounce words well is an art which comes only with practice.

IV. Have pupils exchange papers.

V. Have words spelled correctly while pupils mark mistakes.

VI. Assignment of next lesson.

*Variation in Pronouncing the Spelling Lesson.*

The pronunciation of the spelling lesson may be varied in the following manner :

I. The teacher may pronounce the entire lesson.

II. A pupil who articulates distinctly may pronounce the lesson.

III. Instead of pronouncing one word the teacher may give several at a time.

IV. The teacher may pronounce the word, the class writing the word and definition.

V. The teacher may pronounce the word and the class may write a sentence containing this word.

VI. The child may write the words of the lesson from memory.

*Should Separate Notebooks be Used for Spelling?*

If the pupil has a notebook devoted especially to spelling, even though it be inexpensive, it may incite him to keep it neatly, to take pride in gaining high marks and in making no mistakes throughout the book.

*Suggestions for Correcting Words During the Recitation Period.*

Some of the suggestions for correcting words during the recitation period are as follows:

I. The teacher herself may spell all the words of the lesson.

II. A pupil may spell the entire lesson.

III. Individual pupils may be called upon by the teacher, each spelling one word.

IV. One pupil may spell a word and he in turn may call upon another pupil to spell another word and so on until all the words are spelled.

The pupil may be allowed to mark his own words with or without the presence of the text, or blanks may be exchanged as follows:

I. A pupil may exchange with one sitting in the same seat.

II. With one across the aisle.

III. With one on the opposite side of the room.

It is well to have different pupils exchange papers and thus reduce the opportunity of cheating to the minimum, if possible.

*How Often Should Words be Marked by the Teacher?*

If the pupil knew that each written exercise he produced would pass under the teacher's critical eye, it would be an incentive for him to put forth his best effort always.

Because of limited time the teacher cannot do this. She should examine the spelling blanks twice, or at least once, a

week. The pupil should be given to understand that even though he may be allowed to judge his own or his class-mate's work his marks will pass ultimately under the teacher's eye.

Although working for marks may not be the highest motive, if the rank is plainly marked on the outside of the blank, it may be a valuable incentive to the pupil.

## CHAPTER XXI.

## Questions on Spelling

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1. What is the educational value of spelling?
2. How does it compare in value with arithmetic, geography or history?
3. What good results from the study of the subject?
4. Does it develop the reasoning power?
5. Does it train the mind for other studies?
6. To be well educated is it necessary to spell well?
7. What classes of people need spelling most?
8. Why is there such stress laid upon spelling in the normal school?
9. When should it be taught first?
10. What is the average number of words that a child should learn during his first term of school?
11. Should it be taught in all the grades?
12. When would you cease to teach it?
13. Should there be a separate lesson for the spelling?
14. Should each written production be a spelling lesson?
15. Should oral or written spelling be taught exclusively?
16. Which should predominate?
17. How often does the pupil use oral as compared with written spelling?
18. In what grades should oral spelling be used?
19. How should the word be separated when spelled orally?
20. Should a text be used in teaching spelling?
21. Should only one book be used?
22. What are the best texts in spelling?
23. Should a list be put upon the board?
24. Where should this list be obtained?
25. Should a list of isolated words be taught?

26. Is it advisable to learn to spell words of whose meaning the pupil is ignorant?
27. Should the word be taught as an isolated word?
28. Should definitions be taught also?
29. When should the child use the dictionary in spelling?
30. How should he use it?
31. How should dictation exercises be taught in connection with spelling?
32. Should the rules of spelling be taught?
33. Should they be committed and repeated from memory?
34. Should spelling be correlated with other studies?
35. With what subjects may it be correlated?
36. How many words should be given in one lesson in the early grades?
37. In the upper grades?
38. Should the child be given mis-spelled words to correct?
39. Should there be a list of mis-spelled words?
40. Why is the English language difficult to spell?
41. From what languages are our words derived?
42. Why are people poor spellers?
43. Why are many good students poor spellers?
44. Why are we as a whole a generation of poor spellers?
45. Is poor spelling an evidence of a poor memory?
46. Is there such a thing as being "born short" in spelling?
47. Is it possible for all to be good spellers?
48. Why were our parents good spellers?
49. What should be done with the pupils who miss words?
50. How should we assist a pupil who is trying hard to master spelling who does not seem to make any progress?
51. Should the child write the mis-spelled words twenty-five times?
52. What are the new movements in spelling?
53. What is your opinion of a spelling match?
54. Does not a spelling match detract from the pupils inter-

est in school work enough to over-balance all the good derived from it?

55. What do you think of giving prizes for the best spelling?
56. Is it necessary to know the sounds of the letters before one can become a good speller?
57. Should diacritical markings be taught?
58. How should diacritical marks be taught if they have been neglected in the lower grades?
59. Should rules for diacritical marks be memorized?
60. How should a written spelling lesson be conducted?
61. In what different ways may it be conducted?
62. What variation may there be in pronouncing the spelling lesson?
63. In what order should words be pronounced?
64. Should separate notebooks be used for spelling?
65. In what different ways may the words be corrected during the recitation period?
66. How often should they be marked by the teacher?
67. How may spelling records be kept in the lower grades?
68. What is your opinion of phonetic spelling?
69. What list of words is it allowable to spell as sounded?
70. What is the best time for the spelling recitation?
71. In giving examinations in other studies should the pupil be marked lower for mis-spelled words?
72. What is meant by working for head marks?
73. How much time should be spent on spelling?
74. Give all the devices you can for teaching the spelling lesson.

## CHAPTER XXII.

Questions on Manual Training

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1. What is this age called?
2. Why is this nation turning in this direction?
3. What is manual training?
4. What are the arguments for it from the standpoint of environment?
5. Of the individual?
6. Of psychology?
7. How old is the movement?
8. With whom did it originate?
9. Who are the leaders?
10. Who originated the plan of introducing manual training into the school?
11. Which schools were the first to adopt it?
12. In what schools in this state is it taught?
13. In what grade should instruction begin?
14. Should it be taught as a separate branch in the lower grades?
15. What means of expression has the pupil?
16. How does he show his love for construction?
17. What are the systems by which manual training is taught?
18. Which is advocated in this school?
19. What is the comparative cost of each?
20. What is the approximate cost of inaugurating a manual training course in a small town of a thousand pupils?
21. Is not the pupil of today overburdened with work?
22. How could time be found for manual training?
23. Should it be taken from other studies for this work?
24. Should some standard branch of study be excluded in order to give it place?



25. Would there not be a tendency in having so much additional work, to do no one thing well?
26. To what extent should manual training be taught in the public schools?
27. To what grades should the instruction be extended?
28. What kind of work is adapted to the lower grades?
29. What should be emphasized in the 4th, 5th, 6th, 7th and 8th grades?
30. In the upper grades?
31. Would it be advisable to have this branch in the high school?
32. What work should be given to high school pupils who have had no previous instruction on this subject?
33. How could interest in the study be awakened best among the patrons of the ordinary high school, so that its introduction would be sanctioned?
34. If manual training had been taught in the lower grades, what should be the high school pupil's knowledge of this subject?
35. How much time each day should be given to it?
36. What part of the day should be devoted to it?
37. How much time should be spent upon it in order that it might prove a benefit?
38. At what age should the pupil be allowed to specialize in it?
39. What should be the aim in manual training?
40. Should the pupil understand the real purpose of manual training?
41. Should the meaning of mechanical work be explained?
42. Should the teacher's aim be that of the pupil's?
43. What is the purpose of teaching it in the normal school?
44. Is there scope for individuality?
45. How much of the pupil's own thought and expression should be put into the work?

46. Should emphasis be placed upon the useful or upon the beautiful throughout the course?
47. Could manual training be correlated with other subjects?
48. How could it be correlated?
49. What is the connection between drawing and manual training?
50. Should work be the same for boys and girls?
51. At what age should they work separately?
52. If a girl shows ability in the line of carpentry and joinery, or a boy along the lines of domestic science should provision be made for the bent of each?
53. Does the boy or girl form the more satisfactory pupil in manual training?
54. How should materials be furnished?
55. Should the pupil own the tools with which he works?
56. How should products be marked?
57. Should the dull pupil's products be marked higher than those of the bright pupil?
58. Would manual training keep the pupil in school longer?
59. Would it keep the boys in school?
60. Should the pupil be compelled to take manual training if he has not the least inclination along that line?
61. What should be done in case the parents object to it?
62. Would it be beneficial to the pupil who is intellectually inclined and takes no interest in hand work?
63. Would it be as distasteful to some as book knowledge is to others, so that compulsory educational laws would still be necessary if it were generally taught?
64. Would it take the attention from other work?
65. Would there not be danger of the pupil's becoming so interested that he would neglect other studies?
66. If the pupil takes no interest in books should he be allowed to put them aside entirely for manual training which does interest him?

67. What should be done if interest is lost entirely in other studies?
68. Would manual training do away with apprentice work in trades?
69. Would the instruction which a boy receives in school be sufficient to enable him to earn a living?
70. What trades should be represented in a town not manufacturing extensively?
71. Would a knowledge of manual training promote interest along other lines?
72. Should articles made, be what the pupil would use in his own life?
73. Could manual training be pursued to advantage in the rural districts?
74. As the time in country schools is so filled with recitations how could a place be found for it?
75. How would you manage if parents in the country objected to buying material for the pupil?
76. Would it be advisable in rural schools to require all pupils to take manual training, regardless of the time they were to be in school or the amount of work they did at home?
77. Could muscular development be gained through this work?
78. Should manual training be substituted for physical training?
79. What proof would there be, if this plan of teaching manual training in the schools was carried out, that our country would be more purely a democracy?
80. How could the pupil be shown that any kind of manual work in the outside world is only a larger form of manual training in the school?
81. What opportunity is there for teaching textiles in this work?

82. In teaching cooking should the teacher be compelled to adapt herself to her class?
83. What use could be made of manual training exhibits?
84. In this day of industrial instability, how could what is permanent in manual training be determined?
83. Would the introduction of a manual training course work out in practice as in theory?
86. Would it do away with class distinction?
87. Is it a factor in developing the mind?
88. Would it help to solve our labor problems?
89. Should outside references be demanded in the study?
90. Is manual training a fad?
91. Would first enthusiasm last?
92. Would knowledge gained in this subject result in more artistic decorations of the school room?
93. What would a knowledge of manual training have upon the pupil's ability to purchase?
94. What paper is published especially in the interests of this subject?
95. What is the best text upon this study?
96. In what schools is particularly fine work done?
97. Where may the pupil specialize in this line?

## CHAPTER XXIII.

## Questions on the Five Formal Steps

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1. With what does good teaching deal?
2. In what does it consist?
3. Why have words no magic power?
4. What is the mind's attitude toward knowledge?
5. What is the first duty of the teacher?
6. In erecting a building what does the architect do first?

### First Step—Preparation

7. What is the first of the five formal steps?
8. What are the dangers of omitting this step?
9. Why is the child's sympathy a necessary condition for success?
10. What are the precautions with regard to this step?
11. What should be the teacher's attitude toward the anticipation of facts?
12. What are the characteristics of the pupil's aim?
13. What may the form of the statement of the aim be?
14. Why is it difficult to word properly the pupil's aim?
15. For what does this step of preparation afford opportunity?
16. What is the time required for it?
17. What is the common practice concerning it?
18. What is the name often given to it?

### Second Step—Presentation

19. What is the second step?
20. What is the need for the statement of the aim in this step?
21. What may be the form of the presentation?
22. With what must the class be engaged in order that it may be the second step in instruction?

23. By what methods are most subjects treated?
24. What is the plan of the lecture method?
25. What are the arguments in favor of it?
26. What are the objections to it?
27. What is the plan of the text book method?
28. What are the three phases through which this method has passed?
29. What are the arguments in favor of it?
30. What are the objections to it?
31. What is the plan of the developing method?
32. What are the arguments in favor of it?
33. What are the objections to it?
34. If the teacher wishes to make sure of the real appreciation of knowledge, how must the facts offered, come?
35. For what on the child's part, should the best method make provision?
36. What is the distinction drawn between repetition and review?
37. Before knowledge can be digested what is necessary?
38. What used to be the custom with regard to reviews?
39. Under these conditions what kind of work was done?
40. Of what should reviews aim to put the child in possession?
41. What should they, in the main, signify?
42. How could they be made more interesting?
43. When should be the time for review?
44. What steps are necessary in the mastery of individual notions?

### **Third Step--Comparison**

45. What is the third step?
46. What does it presuppose?
47. To what extent should it be carried?
48. What are the three advantages of comparison?
49. How do comparisons lead to abstraction?
50. What is the difficulty in reaching conclusions?

### **Fourth Step—Generalization**

51. What is the fourth step?
52. What is the difficulty in stating a generalization?
53. To state a conclusion tersely means what?
54. By whom should the generalization be made?
55. The statement of a definition, law or rule should be the outcome of what?
56. What is true of reproducing the book's statement?
57. When should the words of another be accepted?
58. What is the summary with regard to the generalization?

### **Fifth Step—Application**

59. What is the fifth step?
60. What is the child's most difficult problem?
61. What are the errors on the road to application?
62. What is the old question regarding theory and practice?
63. In what manner is the theoretical character of school knowledge brought to light?
64. What is the result of theoretical, bookish knowledge?
65. What does variation and readjustment necessitate?
66. What does it require to apply general notions?
67. To what is the modification of our application of principles likened?
68. Why are exact reviews not the best form of application?
69. What do excessive, routine drills accomplish?
70. What opportunity do other studies furnish?
71. In what should instruction and theory culminate?
72. What should be the movement toward use and application?
73. For what is the school a place?
74. What may education by its theoretical tendency produce?
75. By what does the storage theory need to be reinforced?
76. To teach children to apply knowledge requires what on the teacher's part?

77. What is the amount of time now given to application?
78. How is application shown in the subjects of language and grammar?
79. What must necessarily be done in order to secure the proper kind of thinking?
80. What is one conclusion that springs from this discussion?
81. What is meant by the lesson unit?
82. What has dominated the entire movement?
83. In the application with what are we still operating?
84. Upon what does the length of time required for working out the five formal steps depend?



## CHAPTER XXIV

## List of Texts to be Examined

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**Readers**

Brumbaugh's Standard First Reader.  
Brumbaugh's Standard Second Reader.  
Brumbaugh's Standard Third Reader.  
Brumbaugh's Standard Fourth Reader.  
Brumbaugh's Standard Fifth Reader.

Martin G. Brumbaugh.

Stepping Stones to Literature.

Sarah Louise Arnold.

Charles B. Gilbert.

A First Reader.

A Second Reader.

A Third Reader.

A Fourth Reader.

A Reader for Fifth Grades.

A Reader for Sixth Grades.

A Reader for Seventh Grades.

A Reader for Higher Grades.

Lights to Literature.

Rand, McNally & Co.

Book One.

Book Two.

Third Reader.

Fourth Reader.

Fifth Reader.

Progressive Course in Reading.

George I. Aldrich and Alexander Forbes.

First Book.

Second Book.

Third Book.

Fourth Book.

Fifth Book.

Graded Literature Readers.

Harry Pratt Judson.

Ida C. Bender.

First Book.

Second Book.

Third Book.

Fourth Book.

Fifth Book.

Sixth Book.

Seventh Book.

Eighth Book.

The Jones Readers.—L. H. Jones.

The Jones First Reader.

The Jones Second Reader.

The Jones Third Reader.

The Jones Fourth Reader.

The Jones Fifth Reader.

School Reading by Grades.

Baldwin's Readers—James Baldwin.

First Year.

Second Year.

Third Year.

Fourth Year.

Fifth Year.

Sixth Year.

Seventh Year.

Eighth Year.

Heart of Oak Books.

Charles Eliot Norton.

Book I.

Book II.

Book III.

Book IV.

Book V.

Book VI.

Book VII.

**Language Lessons and Grammar**

Language Lessons.

Book One.

Book Two.

Charles DeGarno

Elements of English Grammar.

George P. Brown and Charles De Garmo.

Elements of English Grammar.

George P. Brown and Charles DeGarmo.

Mother Tongue—Book I.

Mother Tongue—Book II.

Arnold and Kittridge.

Language Lessons.

Grammar Lessons.

Wilbur Fisk Gordy.

William Edward Mead.

Foundation Lessons in English.

Book One.

Book Two.

O. I. Woodley and M. S. Woodley.

Foundation Lessons in English Language and Grammar.

O. I. and M. S. Woodley, and G. R. Carpenter.

New Lessons in Language.

English Grammar and Composition.

Benj. H. Sanborn.

Gordon A. Southworth.

Webster-Cooley Language Series.

Language Lessons—Book I.

Language Lessons from Literature.

Alice W. Cooley.

Book II.

Elementary Composition.

William Frank Webster.

Elementary English.

Elements of Grammar and Composition.

Advanced Grammar and Composition.

E. Oram Lyte.

Graded Lessons in English.

Higher Lessons in English.

Reed and Kellogg.

### **Arithmetics**

The Werner Arithmetic.

Frank H. Hall.

Book I.

Book II.

Book III.

Walsh's Arithmetic.

John H. Walsh.

Walsh's Elementary Arithmetic.  
Mathematics for Common Schools (Intermediate).  
Grammar School.  
    Book I.  
    Book II.  
Higher Arithmetic.

Smith's Arithmetics  
Primary Arithmetic.  
Grammar School Arithmetic.  
    David Eugene Smith.

Primary Arithmetic.  
Public School Arithmetic for Grammar Grades.  
    McLellan and Ames.

The Rational Arithmetic—Elementary.  
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